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SUSTAIN

TRAINING & TECHNICAL ASSISTANCE:
AGTA CONGRESS & SITE VISITS

APRIL 20 - 23, 1994

GUATEMALA

S haring
U nited
S tates
T echnology to
A id in the
I mprovement of
N utrition

A U.S. Private Food Industry initiative
in collaboration with the U.S. Agency for International Development
through a Cooperative Agreement with the National Cooperative Business Association

Upgrading the Food Processing Industries in Developing Countries.

Why SUSTAIN?

SUSTAIN represents a successful collaborative effort between the U.S. food industry and the Agency for International Development (A.I.D.) to upgrade food processing in developing countries. It provides an excellent model for similar private-public sector joint ventures in health, agriculture and other areas of concern to developing countries.

Food processing is a major contributor to development. It serves multiple roles. Food processing can increase the available food supply by extending the life of perishable food products. It can improve the nutritional quality of the diet by making nutritious foods available the year round. It can lead to the growth of related enterprises in transportation, storage, distribution and marketing. And, it can produce much needed foreign exchange by creating value added products both for export and for internal substitution of imported processed foods.

The U.S. food industry has embraced the concept that freely sharing its expertise and knowledge is of mutual benefit to recipient and donor - to the recipient by improving current operations - to the donor by contributing to a healthier global future.

How SUSTAIN Works

A.I.D. missions and trade associations in developing countries publicize SUSTAIN's goals and activities. Executives of U.S. food companies with technical expertise and overall knowledge of the food industry serve as the SUSTAIN Steering Committee, providing guidance and overseeing activities.

Food related companies in developing countries submit their requests to SUSTAIN through the A.I.D. mission or a designated organization in their country. SUSTAIN screens all incoming requests and if necessary asks for additional information. Appropriate U.S. companies are then invited to respond.

Some problems can be readily resolved by providing information. Others require that consultants be sent. When a consultant is sent, the usual assignment is for one to three weeks. Upon completion of the assignment, the consultant prepares a report describing findings and making recommendations. Depending on need, some consultants may return for follow-up visits to ensure that recommendations have been appropriately implemented.

SUSTAIN Helps

Requests are diverse. Help may be needed to solve processing problems, to identify equipment needs and sources of new and used equipment, to train personnel in the use of new equipment and new technologies, to find new uses for indigenous commodities, to establish or improve quality assurance procedures, to control insects and rodents in food processing plants and to improve plant layouts and materials handling.

In the past, U.S. food companies, large and small, have provided technical assistance in the form of information, consultants and training to food processors in Africa, Asia, Latin American and the Caribbean.

SUSTAIN

TRAINING AND TECHNICAL ASSISTANCE:

Guatemalan Association of Food Technologists
Second National Congress of the Food Industry and Industrial Exposition
and Site visits

Guatemala

April 20 - 23, 1994

by

SUSTAIN Volunteers:

Dr. Damien Gabis
Chief Executive Officer, Silliker Laboratories Group, Inc.

Dr. Mary Wagner
Director, R&D/ Quality and Regulatory Operations, General Mills Inc., Gorton's Group

Mr. Anthony Adams
Director, Global Marketing Information, The Coca Cola Company

Dr. Christine Chaisson
Principal, Technical Assessment Systems, Inc.

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NCBA/SUSTAIN Project 111.036

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I. INTRODUCTION

A. SUSTAIN

Sharing U.S. Technology to Aid in the Improvement of Nutrition (SUSTAIN) provides access to U.S. expertise in food processing to help improve nutrition in the developing world. Technical assistance is provided by volunteer professionals from U.S. food companies, universities, and other organizations who donate their time and expertise. In 1991, the Office of Nutrition of U.S. Agency for International Development awarded the National Cooperative Business Association a $2 million, five-year cooperative agreement to work with SUSTAIN's volunteer leadership to improve, expand, and manage the program.

The assistance SUSTAIN volunteers provide contributes to improved health and nutrition through improved food quality, safety, and availability. In many countries, sufficient food is produced but populations are underserved because much of it goes to waste due to inefficient processing and storage. Improper food handling presents a hazard to human health, and improper waste disposal can contribute to environmental degradation. Strengthening manufacturing practices not only captures scarce resources, but also improves food safety and elevates nutritional status.

B. Objectives of SUSTAIN Mission

SUSTAIN volunteers Dr. Damien Gabis (Chief Executive Officer, Silliker Laboratories Group, Inc.), Dr. Mary Wagner (Director, R&D/ Quality and Regulatory Operations, General Mills Inc., Gorton's Group), Mr. Anthony Adams (Director, Global Marketing Information, The Coca Cola Co.) and Dr. Christine Chaisson (Principal, Technical Assessment Systems, Inc.) traveled to Guatemala on April 20 - 23 to participate in the Guatemalan Association of Food Technologists (AGTA) Second National Congress of the Food Industry and Industrial Exposition and to provide on-site technical assistance and training to local food processors. At the AGTA Congress, they delivered presentations entitled "HACCP in the Food Industry", "How to Implement a Total Quality Management Program in the Food Industry", "The Global Consumer: Today and Tomorrow", and "Pesticide Residues: A Barrier to Processed Food Products exported to the United States".

SUSTAIN's participation in the AGTA Congress and organization of the site visits to local food processing plants were a collaborative effort between SUSTAIN, Chemonics and its PROEXAG II project in Central America, and AGTA. Funding for international travel and local hotel and meal costs was cost-shared by these three organizations.

II. REPORT

SILLIKER LABORATORIES GROUP, INC.

900 Maple Road
Homewood, IL • 60430
(708) 957-7878 • FAX (708) 957-8449

FOOD SAFETY • QUALITY • NUTRITION

June 3, 1994

Ms. Elizabeth Turner, Director
Sustain Program
National Cooperative Business Association
1401 New York Avenue, N.W. Suite 1100
Washington, D.C. 20005-2160

Dear Liz:

Here is the mission report from my visit to the AGTA Congress at El Dorado Hotel in Guatemala City from April 19-23, 1994.

- **ITINERARY OF SUSTAIN MISSION**

See attached Exhibits A and B.

- **BRIEF SUMMARY OF PURPOSE OF MISSION**

The purposes of the trip to Guatemala City were to deliver a presentation entitled "HACCP: How to implement it in the food industry" at the Second National Congress of the Food Industry and Expo-AGTA "94 and to offer consultations on issues of microbiological safety and quality to personnel associated with local food companies.

- **RECOMMENDATIONS FOR FOLLOW UP**

1. Maintain/increase the level of professional contact with the food industry in Guatemala.
2. Share our technical and marketing information with Guatemalan food industry personnel.
3. Invite Guatemalan food industry personnel to visit U.S. volunteer food companies and food industry service companies.
4. Continue to develop technical training courses for trainers in Guatemala.
5. Sustain to provide volunteer consulting services on food safety and quality issues to qualified local companies.
6. Longer and subject-focused visits are needed in order for the SUSTAIN volunteer's work to be practically useful.

- **SITE VISITS (Food Processing Plants and INCAP)**

1. ALIMENTOS KERN DE GUATEMALA
Wednesday April 20, 1994, 8:00 a.m.- Noon

Brief Summary of Visit: Kern's processes (cans) fruits and vegetables. The primary products are black beans, ketchup, and juices. My visit was hosted by Luis Alfredo Garcia, Manager of Quality Control. Also present were personnel from the Quality Control department and the laboratory workers. A plant tour was conducted to inspect the facilities. I presented the HACCP seminar to the QC and lab workers.

Assessment of Problems and/or Needs for Assistance: The primary food safety control points for the Kern's products are thermal processing. Cursory examination of the thermal processing programs indicated that the processes are effective and under control. A significant portion of the fruit and vegetable juices are thermally processed and then aseptically packaged with Tetra-Pak equipment for ambient shelf stability. They do not have a sophisticated understanding of the nature of spoilage of high acid juices. Kern's either lacks or did not share their information with me about actual product spoilage rates in the field. There seems to be lacking an understanding of the nature of microbial growth and detection in their high acid products.

There is much opportunity for more beneficial work at Kern's. At least on the basis of this first whirlwind visit, there is a need to further develop the staff's technical problem solving skills and basic knowledge of food microbiology.

Technical Assistance or Recommendations Delivered: We discussed sampling plans and more timely product quarantine release systems for the aseptically packaged juices. We discussed the possible sources of microbial post heat processing contamination and some of the means to prevent it. I made suggestions for protocols for experiments to accurately measure spoilage rates and to gain more understanding of factors controlling shelf life/spoilage of the aseptically packaged juice products. I also offered some information on laboratory methods for rapid detection and identification of yeasts' growth in juices. There is not a direct food safety problem with the juices because the pH's are less than 4.5. I sent them a list of the important food microbiology reference books that they should obtain.

List of People I Met With: See Exhibit C

2. OSMOSIS

Wednesday April 20, 1994, 14:30-16:30

Brief Summary of Visit: I visited with Carlos Rafael Anzueto, principal, of OSMOSIS. This is a relatively new R&D, processing, and marketing and sales consulting company for the Guatemalan food industry. They specialize in chemical engineering, industrial engineering and marketing and sales. Carlos Rafael appears to be a very energetic person with many contacts in the local food industry. He seems to have many active consulting projects.

Assessment of Problems and/or Needs for Assistance: The primary subject of my visit was to discuss the potential for OSMOSIS to establish a food testing laboratory in Guatemala. He appears very enthusiastic about this possibility. After my discussion with Carlos Rafael I would say that his conservative economic approach to setting up a lab would reduce his risks and give it a fairly good chance of success. He seems to have the "customer service" approach to his business. Carlos Rafael appears to have many contacts in the food industry that will provide the starting business base for a new lab. Furthermore, the existing clients from his consulting business will also provide a customer base for a new lab.

Carlos Rafael also has a business relationship with the American Soybean Association.

Technical Assistance or Recommendations Delivered: I shared the Silliker experiences of starting new laboratories. I gave him encouragement that the risks to success may not be as great as they appear, in light of the fact that he said that he has already built a successful consulting business. I gave him some ideas on approaches for setting up a microbiology lab. We discussed the options for setting up a microbiology and chemistry testing lab for the existing clients.

List of People I Met With: See Exhibit D for business card and OSMOSIS brochure.

3. EMPECADORA PERRY

Thursday, April 21, 1994, morning

Brief Summary of Visit: Empecadora Perry produces ready-to-eat processed meats for the Guatemalan market. Lisbeth Villatoro from the Quality Control department was my host. Alice Perry, owner, and Luis Pedro Perez, Production Manager gave a tour of the plant. We discussed microbiological sampling of the processing environment and some of the potential cross contamination problems that would be associated with their products.

Assessment of Problems and/or Needs for Assistance: This is a small ready-to-eat meat processing plant by U.S. standards. The plant is crowded and the flow of product is serpentine. Refrigeration may not be adequate. The environment is wet, offering the potential for significant microbial growth on equipment, floors, etc.. Management seems to understand the need for microbiological control of the product, but may not have the detailed knowledge to be as effective as possible. They seem to know about the requirements for high levels of sanitation required, but I did not confirm the actual performance of the plant with respect to low counts on equipment, etc.. Alice Perry and Luis Pedro Perez appear to know very much about the details of production. I believe that Lisbeth Villatoro has recently joined the Perry firm, and so she was learning too.

Technical Assistance or Recommendations Delivered: We discussed various methods for microbiological sampling of the processing equipment and the environment. I have sent Luis Pedro Perez much information about Listeria control in meat plants, availability of worker training videos in Spanish, list of reference books for use by the microbiology lab. We discussed potential microbial risk areas and I offered possible solutions to some of the problems that we discussed. For example, I related some of my experiences in cleaning and sanitizing their specific brand names of vacuum packaging machines. I reviewed their time/temperature requirements for cooking and found them to be in order. I suggested that they try to make more use of time/temperature recording charts to monitor their critical control points. Lastly, I gave an abbreviated presentation of the HACCP talk that was to be delivered to the AGTA conference.

List of People I Met With:
Alice Perry
Luis Pedro Perez
Lisbeth Villatoro
EMPECADORA PERRY
6a. Av 33-49, Zona 3
33 Calle 0-73, Zona 3
Guatemala City
711206-721572
Fax 771787

4. INCAP
Friday, April 22, 1994, 14:00-16:00

Brief Summary of Visit: I visited INCAP to assess and discuss the potential for INCAP to perform testing for fees for the Guatemalan food industry. My host was the microbiology group leader, Floridalma Cano. I invited Flori to visit Silliker Laboratories when she came to the U.S. for the ASM convention in May 1994.

Assessment of Problems and/or Needs for Assistance: At present, the focus of the microbiology lab appears to be on clinical microbiology side of foodborne illness and on research of microorganisms causing foodborne and waterborne illnesses. Nevertheless, INCAP labs are well-equipped to perform food microbiology testing. However, it seems that there is a lack of practical knowledge of the types and numbers of tests normally required by the food industry. For example, Flori mentioned that on a busy day the microbiology lab could process about ten samples. Typically, 10 samples per day would be expected from a single client! There seems to be an absence of practical knowledge about the microbiology of food processing technology, etc.. The business knowledge, attitudes and skills necessary for a successful launch of a private laboratory venture seem to be absent at this time. In my opinion, INCAP would have to hire a new technically sound business person to lead a private food testing laboratory project.

Technical Assistance or Recommendations Delivered: I did not make specific recommendations during my visit. The shift in approach that would be required, in my opinion, to expand the existing services to do commercial food testing was too great for me to have discussed the changes required during a cursory 1-2 hour visit. They seem to be very good at their existing work.

List of People I Met With:
Floridalma Cano
Instituto de Nutricion De Centro America (INCAP)_
Carretera Roosevelt
Zona 11 - APDO. Postal 1188
Guatemala, C.A.
Phone: PBX 715655 - 723762
Fax: (502-2)736529

5. CONSULTATIONS WITH COMPANIES DURING THE AGTA CONGRESS IN THE AGTA OFFICE

- Malher Successores & CIA. Limitada
  48 Calle 15 - 74 Zona 12
  Guatemala, C.A. 01012
  Ph: PBX 761179, Fax: (502-2) 761189

I met with Ing. Ruth E. Orellana Martinez, Chief of the Laboratory. Malher produces a wide variety of soups and beverage products. We discussed microbiological sampling and testing of raw materials and finished products. We discussed HACCP, the potential for cross-contamination of finished products by raw materials, cleaning and sanitizing practices, the hazards of wet cleaning of dry

processing environments. The Malher people seem to have a sound understanding of the microbiological risks. They have recently established the microbiological testing lab.

- Foremost Dairies de Guatemala
  Calzado Raul Batres 32-33, Zona 12
  Guatemala, C.A.
  Ph: 762178, Fax: 766262

I met with Marta Leticia Almengor, Manager of Quality Control. We discussed testing methodology for detection of Listeria monocytogenes in dairy products and processing plant environments. I sent her information on testing methods, especially rapid cultural testing procedures.

5. **AGTA Congress Speaker Reception at Museo Ixchel**
   April 22, 1994, Evening

The AGTA organizers held a reception for presenters and key AGTA workers at the Museo Ixchel. The event was a relaxed social meeting. We were given tours of the museum where the works of indigenous artists are displayed. Awards and gifts were presented to many AGTA workers and to the speakers who came from other countries.

- **GABIS' PRESENTATION AT AGTA CONFERENCE**

  - **Materials prepared for workshop:** See enclosed packet of 35-mm slide printouts (Exhibit D)

  - **Congress Inauguration Program:** See enclosed AGTA Congress Inauguration Program (Exhibit E)

  - **Promotion/publicity materials prepared by local host organizations:** See enclosed Exhibit F, AGTA Congress Official Program.

  - **List of Congress participants:** Not available from D. Gabis

I have sent my expense form Dave Tacker at Chemonics. Liz, if you have any questions, please feel free to call me.

Sincerely yours,

Damien

Damien A. Gabis, Ph.D.

son Travel Network

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Arlington, Virginia 22202
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EXHIBIT A

IS PERSON: 69 ITINERARY/INVOICE NO. 0052339 DATE: 30 MAR 9[illegible]
TOMER NBR: 032100 RPRACI PAGE: 01

TO: CARLSON TRAVEL NETWORK-CHEMONICS
2000 M ST NW, SUITE 200
WASHINGTON DC 20036
PHONE 202 466-5340
FAX 202 331-8202

: GABIS/DAMIEN DR REF: 023-TA6790

APR 94 - TUESDAY

AIR	AMERICAN AIRLINES	FLT:917	ECONOMY	LUNCH
	LV CHICAGO OHARE		1139A	EQP: AIRBUS A30[illegible]
	AR MIAMI INTERNTNL		330P	NON STOP
	GABIS/DAMIEN DR SEAT-15H			
AIR	AMERICAN AIRLINES	FLT:929	ECONOMY	DINNER
	LV MIAMI INTERNTNL		445P	EQP 727 STRETCH
	AR GUATEMALA CITY		522P	NON STOP
	GABIS/DAMIEN DR SEAT-19D			

APR 94 - SATURDAY

AIR	AMERICAN AIRLINES	FLT:2108	ECONOMY	BREAKFAST
	LV GUATEMALA CITY		915A	EQP: 727 STRETCH
	AR MIAMI INTERNTNL		147P	NON-STOP
	GABIS/DAMIEN DR SEAT-23D			
AIR	AMERICAN AIRLINES	FLT:96	ECONOMY	
	LV MIAMI INTERNTNL		320P	EQP: SUPER 80
	AR CHICAGO OHARE		532P	NON-STOP
	GABIS/DAMIEN DR SEAT-33F			

TICKET 0011377450529 GABIS DAMIEN DR
BILLED TO TP1016633019001601

SUB TOTAL
NET CC BILLING

TOTAL AMOUNT DUE

Confm # 3424 9.00 4/19
for LMO

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El Dorado –
AGTA 337024

EXHIBIT B

DR. DAMIEN GABIS

Hostess: Ana Lucrecia Galindo (Tel. 83443)

SCHEDULE

DAY	TIME	ACTIVITY
19	17:22	ARRIVAL. Luz Marie Ortega/Breatriz Matzdorf
20	08:00 - 12:00	ALIMENTOS KERN DE GUATEMALA. Luis Alfredo García
20	14:30 - 16:30	OSMOSIS. Carlos Rafael Anzueto
21	Morning	EMPACADORA PERRY. Lisbeth Villatoro
21	Afternoon	Conference at Congress
22	Morning	Open Sessions with participants at Congress
22	14:00 - 16:00	INCAP. Dr. Luiz Elías
23	09:15	DEPARTURE

HOTEL STOFFELLA - Tel.391878 - FAX 310823
2a. Av. 12-28, zona 10

EXHBIT C -- LIST OF KERN PERSONNEL WHO MET WITH D. A. GABIS ON APRIL 20, 1994 AT THE KERN FACTORY IN GUATEMALA CITY

Kern's

HOME 72 11 53

Lic. M. Sc. Luis Alfredo García Vela
Gerente de Calidad

Alimentos Kern de Guatemala, S. A. Km. 6½ Carretera al Atlántico, Zona 18
Tel. 562222, Fax 562346, Telex 5786 Kern Gu, Apdo. Postal 379, Guatemala, C. A.

Kern's

Lic. Maynor Ordóñez
Departamento de Calidad
Jefe de Laboratorio

Alimentos Kern de Guatemala, S. A. Km. 6½ Carretera al Atlántico, Zona 18
Teléfono: 562222, Telex 5786 Kern Gu, Apartado Postal 379, Guatemala, C. A.

Kern's

Lic. Guillermo Solórzano
Departamento de Calidad

Alimentos Kern de Guatemala, S. A. Km. 6½ Carretera al Atlántico, Zona 18
Teléfono: 562222, Telex 5786 Kern Gu, Apartado Postal 379, Guatemala, C. A.

Kern's

Ing. Heidi Krings
[illegible]

Alimentos Kern de Guatemala, S. A. Km. 6½ Carretera al Atlántico, Zona 18
Teléfono 562222 PBX Telex 5786 Kern Gu Apartado Postal 379 Guatemala, C. A.

Kern's

Ing. Víctor Blanco
Departamento de Calidad

Alimentos Kern de Guatemala, S. A. Km. 6½ Carretera al Atlántico, Zona 18
Teléfono: 562222, Telex 5786 Kern Gu, Apartado Postal 379, Guatemala, C. A.

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EXHIBIT D – INFORMATION ABOUT THE OSMOSIS CONSULTING FIRM AND RAFAEL ANZUETO, PRINCIPAL

Nuestros servicios
le consultoría incluyen
ina combinación
le las siguientes disciplinas:

**ngeniería y Tecnología
le Alimentos**

ngeniería Química

ngeniería Industrial

Mercadeo y Ventas

En **OSMOSIS** estamos comprometidos con los más altos estándares de excelencia operativa, filosofía con la que hemos alcanzado, en poco tiempo, logros significativos, reconocimiento y satisfacción de nuestros clientes.

Dicha filosofía, apoyada por los resultados obtenidos, ha hecho que empresas internacionales confíen en **OSMOSIS** como firma de representación en Guatemala, con lo que además hemos reforzado y ampliado nuestros recursos y servicios. Tal es el caso de la firma consultora Agricultural Development Consultants, Inc., AGRIDEC, con sede en Miami, Florida, y de la Asociación Americana de Soya, ASA.

OSMOSIS
IMPULSO Y DESARROLLO

19 Calle 12-52, Zona 10
Tels. (502-2) 33-5335/68-1493
Fax (502-2) 33-5336
Guatemala

OSMOSIS
IMPULSO Y DESARROLLO

Carlos Rafael Anzueto S.
Consultor Gerente

19 Calle 12-52, Zona 10
Tels. (502-2) 33-5335/68-1493
Fax (502-2) 33-5336
Guatemala

Servicios de Consultoría
para la Industria
de Alimentos

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OSMOSIS* es una firma guatemalteca de consultoría, orientada a la pequeña y mediana empresa, sirviéndolas con un enfoque multidisciplinario en su operación, apoyada en una estructura de consultores asociados de alto nivel profesional.

En **OSMOSIS** contribuimos al desarrollo continuo y exitoso de nuestras empresas-clientes, apoyando a sus equipos técnico-administrativos a través de la identificación de puntos críticos y oportunidades en la operación, el desarrollo de áreas específicas y la implementación de proyectos. Todo orientado a impulsar su negocio, porque **OSMOSIS** es precisamente eso, impulso!

(*)Del griego ὠσμός, acción de

Podemos Apoyar e Impulsar el Desarrollo de su Empresa en las Siguientes Areas

Ingeniería y Tecnología de Alimentos

- Manejo Post-Cosecha de Productos Agrícolas
- Transformación, Procesamiento y Preservación de Productos Agrícolas, Alimentos y Bebidas
- Reformulación y desarrollo de Productos
- Estimación de Vida Util
- Evaluación Sensorial
- Control y Garantía de Calidad
- Desarrollo y Ensayo de Empaques
- Desarrollo y Evaluación de Procesos de Producción
- Elaboración de Guías y Manuales de Operación
- Selección de Materiales y Equipo

Ingeniería Química

- Evaluación de Procesos Industriales y de Manufactura
- Control y Garantía de Calidad
- Elaboración de Guías y Manuales de Operación
- Selección de Materiales y Equipo

Ingeniería Industrial

- Estudios de Métodos y Procedimientos
- Estudios de Tiempos y Movimientos
- Análisis de Productividad y Eficiencia

Mercadeo y Ventas

- Planificación Estratégica
- Desarrollo y Evaluación de Objetivos, Estrategias y Planes de Acción en las siguientes áreas (Planificación de Mercado):
  - * Producto
  - * Precio
  - * Publicidad
  - * Promoción
  - * Distribución
- Planificación y Análisis de Investigación de Mercados
- Evaluación de la Fuerza de Ventas

Empresas que utilizan nuestros servicios incluyen industrias procesadoras de alimentos y bebidas; instituciones de abastecimiento y servicio de productos alimenticios; industrias químicas y de manufactura; agricultores, y grupos o individuos con intereses de inversión y diversificación.

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EXHIBIT D -- PACKET OF INFORMATION ON HACCP PRESENTED AT THE 1994 AGTA CONGRESS IN GUATEMALA CITY

The Hazard Analysis Critical Control Points (HACCP) system is recognized as a most effective method for insuring food safety. HACCP relies on identification and control of health hazards associated with foods and the establishment, control and monitoring of critical control points. HACCP builds safety into foods rather than inspecting them for defects once produced. HACCP is an early warning system that allows process deviations to be corrected quickly before unsafe product is made. HACCP implementation by food companies will eventually be mandatory in the USA and is likely to be a future requirement for international trade. Regulatory agencies in the USA have either made or are preparing proposals for mandatory implementation of HACCP by the food industry.

Implementation of HACCP by industry requires application of seven principles: 1. Perform an evaluation of health/quality hazards associated with the food; 2. Determine the critical control points(CCPs) where hazards can be eliminated, prevented or minimized. 3. Establish limits at CCPs to control hazards; 4. Establish monitoring procedures to assure that CCPs are under control; 5. Establish remedial actions to return CCPs to control; 6. Establish record keeping systems to document the activities of the plan; 7. Establish procedures to verify the effectiveness of the plan.

Development and implementation of a HACCP plan requires a team representing the different areas of responsibility in the plant. An experienced HACCP consultant is useful to facilitate the process. The health hazards associated with each process and the intended use of the product must be identified. Outside technical expertise is often useful to help conduct the hazard analysis. A simple HACCP system is more likely to be accepted by those who will operate and maintain it. Implementation of HACCP may take many months because of the need to train the team, design the plan, and educate employees.

HACCP: How to Implement it in the Food Industry

Dr. Damien Gabis
Silliker Laboratories Group, Inc.
Homewood, Illinois, USA

Presented at the Second National Congress of the Food Industry and Expo - AGTA '94
El Dorado Hotel
Guatemala City, Guatemala
April 20 - 23, 1994

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What HACCP IS

- Where HACCP developed
- Current status

What HACCP Is

1. Systematic approach to food safety
2. Organized risk assessment
3. Focus on critical control points
4. Monitoring and verification built-in

What HACCP Is

5. Documentation of activities
6. Continuous control
7. Prevention rather than inspection
8. Early warning of process deviations
9. Best case scenario
10. Replacement for microbiological testing

HACCP Principles

#1. Hazard Analysis

- Determination of hazards A thru F
- Assignment of risk category 0 thru VI
- Accomplished for each food and its ingredients / components

Hazard

A biological, chemical or physical effect that produces an unacceptable health risk.

Hazards

A. Special class of non-sterile products intended for at risk populations

B. Contains "sensitive ingredients" microbiologically

C. No processing step that destroys microogranisms

D. Subject to recontamination after processing, before packaging

E. Substantial potential for abuse in distribution

F. No terminal heat processing after packaging

HACCP Principles

#2. Determine CCP

- Any point or procedure at which control can be exercised to eliminate, prevent or minimize an unacceptable health hazard.
- All hazards identified must be controlled at some point (s).
- Are located at points in a process where hazardous microorganisms need to be destroyed or controlled.

HACCP Principles

#3. Establish Critical Limits (CL) for CCP's

- Prescribed tolerances that must be met to control an unacceptable health hazard.
- If CL is out of control the CCP is out of control and corrective action must be taken.
- Criteria most often used are temperature, time, moisture level (A_w), pH, acidity, preservatives, salt concentration, available chlorine and sensory information.

HACCP Principles

#3. Establish Critical Limits (CL) for CCP's *(continued)*

- Includes cooking, chilling, sanitizing, formulation control, prevention of cross contamination, employee hygiene and environmental sanitation.
- Control point is where loss of control does not lead to an unacceptable health risk.

HACCP Principles

#4. Establish procedures to monitor CCP's

- Monitoring is the scheduled testing or observation of a CCP and its critical limits.
- Monitoring determines if the CL and CCP are in or out of control; it must be as accurate as possible.
- Monitoring should be continuous or at frequently enough intervals to reliably indicate the hazard is under control.

HACCP Principles

#4. Establish procedures to monitor CCP's *(continued)*

- There is no tolerance for exceeding a critical limit.
- Monitoring procedures need to be done rapidly.

HACCP Principles

#5. Establish corrective actions for deviations to CCP's

- Actions taken must eliminate the hazard created by the deviation and return the CCP to control.
- Actions must assure the safe disposition of the product.
- Actions must be a part of the plan and approved by regulatory agencies where appropriate.

HACCP Principles

#6. Establish effective record-keeping system that documents the activities of the HACCP plan.

- Records will include the HACCP plan, any modifications to it, all monitoring results, deviations and corrective actions taken.
- Records must be readily available for verification.

HACCP Principles

#7. Establish verification procedures

- To review HACCP plan, monitoring records, deviations and corrective actions and collect random samples for testing.
- Routinely and unannounced.
- By different levels of management.
- By outside experts particularly when plans first established.

How is HACCP Implemented?

- Make commitment
- Establish HACCP team
- Enlist outside expertise
- Train team and employees
- Develop HACCP program
- Develop phase-in plan - no quantum leaps
- Verify program - outside audit
- Establish responsibilities
- Develop and verify flow charts

What Does HACCP Do For Me?

- Provides continuous control
- Catches out-of-control situations early
- Makes immediate corrections
- Provides safer products
- Prevents out of spec products
- Eliminates or reduces rework, product holds, returns and recall
- Develops quality image / reputation
- Increases quality of people

What Does HACCP Do For Me?
(continued)

- Improves employee morale
- Identifies CCP / Focuses efforts
- Improves understanding of the process
- Organizes / systemizes control efforts
- Increases customer satisfaction
- Gives competitive edge
- Sum these all up and it:

Increases Financial Returns and Increases Profits

What Does HACCP Cost?

- Commitment in attitude and funding
- Developing the HACCP program
- Education and training
- Increase in personnel - depends on starting point
- Documentation
- Verification

Is HACCP For Me?

- What are your goals?
- Where do you want your company to go?
- What is your business attitude?
- How committed are you to food safety and quality?
- Where are you now with quality control / food safety?
- Do you really want to make the effort?
- Can you apply the HACCP principles?

What Are the Disadvantages?

HACCP Requires:

- Commitment
- A plan
- Training and education
- Employee involvement
- Monitoring
- Documentation
- Verification
- Out-of-pocket costs

HACCP is a Complex System

What Do You Need to Make It Work?

- Top management commitment
- Management ownership
- Employee ownership
- Production ownership
- Assigned responsibilities
- Documentation
- Verification - no assuming
- MBWA
- Not too many CCP's

Can it Work With TQM?

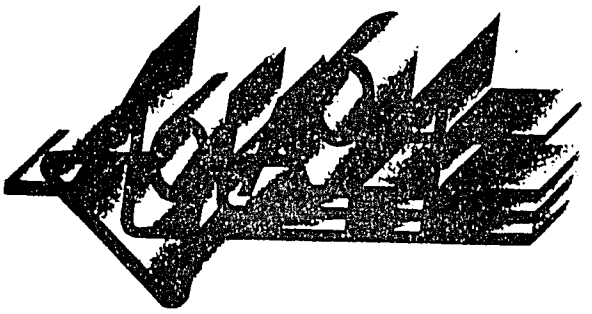
- Yes... like a hand in a glove

Can it Work With ISO 9000?

- YES
- HACCP is international

EXHIBIT E -- CONGRESS INAUGURATION PROGRAM

CEREMONIA INAUGURAL



SEGUNDO CONGRESO NACIONAL DE LA INDUSTRIA ALIMENTARIA Y EXPOSICION INDUSTRIAL

SALON EMPERADOR

HOTEL EL DORADO

20 DE ABRIL, 1994

GUATEMALA, CENTRO AMERICA

P R O G R A M A

BIENVENIDA

Lic. Clark MacDonald
Presidente Comite Organizador, AGTA'94

HIMNO NACIONAL

INTRODUCCION AL EVENTO

Lic. Luis Alfredo García Vela
Presidente, AGTA

INAUGURACION OFICIAL

Excelentísimo Señor Presidente de la República
Lic. Ramiro de León Carpio
o su representante

CONFERENCIA INAUGURAL

"Mercado Global un Reto para
la Industria de Alimentos"
Dr. Anthony Adams

INAUGURACION
EXPOSICION INDUSTRIAL
CORTE DE LA CINTA SIMBOLICA

COCKTAIL INAUGURAL

Cortesía de Alimentos KERN
de Guatemala, S.A.

Bebidas Cortesía de Importadora
y Distribuidora IZABELLE

ASOCIACION GUATEMALTECA DE TECNOLOGOS EN ALIMENTOS

AGTA

Revista de la Asociación Guatemalteca de Tecnólogos en Alimentos

Año 5 Número 24 Enero Marzo 1994

PROGRAMA OFICIAL

Léalo y circúlelo

Gte. General ☐ Gte. Producción ☐ Gte. C. Calidad ☐
Superintendente ☐ Gte. Compras ☐ Mercadeo ☐ ☐

Registrado como correspondencia de Segunda Clase en la Dirección General de Correos Número 2725/79 el día 22 de mayo de 1989.
Porte Pagado

Soya
Asociación Americana de Soya

AGTA 94
II Congreso Nacional de la Industria Alimentaria y Exposición Industrial.
20 - 23 de abril de 1994. Hotel El Dorado, Guatemala, Centroamérica

Guatemala, 20 de abril 1994

ALIMENTOS, S.A.

SIDASA

EL ESTABLO
guatemala city

Estimados lectores:

Nuevamente, y por segunda vez consecutiva, tengo el gusto de darles la más cordial bienvenida a este Congreso Nacional, AGTA 94. Este Congreso, al igual que el del año 1992, ofrece un programa de alto nivel y de calidad internacional, y esto se debe al trabajo tesonero de un pequeño grupo de asociados y amigos de la Asociación que venimos trabajando en la organización de este evento ya hace más de un año; es necesario pero, que en el futuro, AGTA con su nueva Junta Directiva logre un mayor nivel de involucramiento por parte de sus miembros, para así garantizar que tanto la Asociación como este tipo de eventos no sólo se perpetuen, sino que mantengan el mismo nivel de excelencia como el que se ha mantenido a la fecha.

Deseo agradecer de manera particular al Comité Organizador y a la Sra. Ani Taracena de Quintero por la ardua labor realizada, al Dr. Ricardo Bressani con quien contamos siempre incondicionalmente para la coordinación de la parte científica, a todos nuestros patrocinadores y anunciantes, pero particularmente al Programa Sustain, a la Asociación Americana de la Soya, Productos Roche, Sidasa, Alimentos Kern de Guatemala S.A. y a ustedes, participantes de este evento, ya que sin su ayuda y/o participación AGTA 94 no se podría llevar a cabo.

Atentamente,

Lic. Juan Carlos Morales Marcucci
DIRECTOR DE MERCADEO Y EVENTOS

8a. Avenida 15-45, Zona 10, Torre I Oficina 304, Centro Empresarial. Tel. y Fax: (502-2) 337024
Ciudad de Guatemala, Guatemala. Apartado Postal 8F, 01910, Guatemala.
U.S. Postal Address: AGTA M-333, P.O. Box 02-5345, Miami, Fl. 33102-5345

Hotel El Dorado

QUAKER

Roche

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AVIATECA
La línea aérea de Guatemala.

Importadora y Distribuidora
IZABELLE

Kern's

SUSTAIN

REPRESENTACIONES DEL CARIBE S.A.

"Sirviendo a la Industria Alimenticia"

Mc Cormick	Condimentos, sazonadores y sabores.
Quest INTERNATIONAL	Aromas y sabores
CHR. HANSEN'S	Cuajos y cultivos
HERMANN SCHLATERMUND	Productos químicos e ingredientes
Gumix International	Gomas vegetales
WARNER JENKINSON	Colores certificados
UNION STANDARD EQUIPMENT CO.	Maquinaria Reconstruida
natra	Cocoas en polvo y productos derivados del cacao
GREATIDE Group of Machinery Manufacturer GREATIDE INDUSTRIAL CO., LTD.	Maquinaria Industrial

REPRESENTACIONES DEL CARIBE S.A.

AV. REFORMA, 1-50 ZONA 9 FAX 34 53 82 TELS. 34 53 83 AL 5 TELEX: 5290 GUATEMALA, C. A.

EDITORIAL

BIENVENIDOS A AGTA'94

La Asociación Guatemalteca de Tecnólogos en Alimentos, AGTA, se siente muy orgullosa de presentar el II Congreso Nacional de la Industria Alimenticia y Exposición Industrial, AGTA'94. Esta es la culminación de un largo período de dedicación y esfuerzo por parte del Comité Organizador, cuyos miembros han hecho todo lo posible por hacer de este Congreso un evento de primera categoría. Como muestra de lo anterior, se contará con conferencistas distinguidos, extranjeros y nacionales de reconocido prestigio a nivel internacional.

Varias de las actividades programadas deben destacarse. La conferencia inaugural nos situará de inmediato en lo que es el temadel momento en todo el mundo: Mercadeo Global; impartida por el Sr. Anthony Adams, The Coca Cola Company, esta charla será la introducción perfecta al simposium sobre los retos de la globalización y la apertura de mercados, tema con el que se inicia el Congreso. En este simposium se expondrá con más detalle la situación del área centroamericana y guatemalteca y cómo afectará a la industria de alimentos.

El simposium sobre Calidad Total será también de sumo interés, tanto por la experiencia de los expositores como por la importancia que reviste el tema ante la cada vez mayor presencia de productos extranjeros en el mercado local.

Otro simposium interesante será el ofrecido por la Asociación Americana de Soya, cuya colaboración para la realización de este Congreso es muy valiosa.

Después de la sesión sobre nuevas tecnologías, temas de especial interés para la industria de alimentos y conferencias simultáneas tendremos una mesa redonda que tratará sobre la relación Industria-Academia. Aquí se analizará la importancia del rol que las empresas de alimentos deben tener en la formación de recursos humanos, como parte del desarrollo contínuo que debe tener la industria. Además, se plantearán las necesidades que existen por parte de las industrias en cuanto a personal especializado.

Resumiendo, AGTA'94 se presenta como una excelente oportunidad para evaluar la situación de la industria de alimentos en relación a la apertura de mercados, y así poder responder a la pregunta ¿Estamos preparados para competir?

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Flachsmann.Contra-portada

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AGTA 94 - INFORMACION GENERAL AGTA 94

ASESORÍA

Los Técnicos de la Asociación Americana de la Soya y los conferencistas extranjeros atenderán consultas personales, de acuerdo a cita previamente establecida y confirmada en Secretaría.

CALENDARIO SOCIAL

Miércoles 20

Cocktail Inaugural 20:00 Hrs., Salón de Exposiciones. Cortesía de Alimentos Kern de Guatemala, S. A. Admisión con gafete o invitación especial. Bebidas cortesía de Importadora y Distribuidora Izabelle.

Jueves 21

Hospitality Suite 19:00 Hrs. en adelante. Salón María del Rosario. Invitación especial necesaria.

Fiesta para Estudiantes 20:00 Hrs. en adelante. Cortesía de El Establo. Invitación especial necesaria.

Viernes 22

Recepción del Presidente, a conferencistas y participantes internacionales. Invitación especial necesaria.

Sábado 23

Cocktail de Clausura 13:00 Hrs. Salón Veranda. Cortesía de Asociación Americana de la Soya. Bebidas cortesía de Importadora y Distribuidora Izabelle. Admisión con gafete de participación.

CÓDIGOS DE COLOR GAFETES

Los listones que cuelgan de los gafetes identifican a los portadores.

Azul: Participante Internacional
Verde: Expositor
Rojo: Conferencista
Blanco: Organizador
Amarillo: Edecán/Staff

EXPO

El horario de exposición es el siguiente:

Miércoles	20:00 - 22:00 horas
Jueves	8:00 - 19:00 horas
Viernes	8:00 - 19:00 horas

GAFETES

Los gafetes deben portarse en todo momento para ingresar a conferencias, eventos sociales y almuerzos. Son personales e intransmisibles. Su reposición cuesta Q20.00 en Secretaría, previa identificación.

HORARIO

Por lo apretado del programa científico, las conferencias darán inicio exactamente a la hora indicada.

INFORMACIÓN

En Secretaría, Salón 222, Segundo Nivel

INSCRIPCIÓN

En Secretaría, Salón 222, Segundo Nivel.

PARQUEO

Por seguridad, recomendamos estacionar su automóvil en el parqueo del Hotel (sobre la 14 Calle). Tarifa especial para participantes de AGTA'94, Q5.00 de 8:00 a 18:00 horas y Q5.00 de 18:00 horas en adelante. Indispensable que su ticket sea sellado en Secretaría.

REA

Junto con su gafete y carpeta se le entregó una boleta para una rifa y un cuestionario. Escriba su nombre y dirección, visite 10 o más stands, haga que le sellen su boleta en cada stand, llene el cuestionario y entréguelos en Secretaría para la Gran Rifa que se llevará a cabo el sábado 23 en el Cocktail de Clausura. Fabulosos premios: Pasaje Aéreo (destino sorpresa), cena para dos personas, cortesía de Hotel El Dorado y muchos premios más.

SALÓN DE CONFERENCISTAS

Salón 222, Segundo Nivel, para uso exclusivo de conferencistas y organizadores.

SECRETARÍA

Salón 222, Segundo Nivel.

Horario:

Miércoles:	14:00 - 20:00 horas
Jueves:	8:00 - 19:00 horas
Viernes:	8:00 - 19:00 horas
Sábado:	8:00 - 13:00 horas

SERVICIOS VARIOS

Confirmación de pasajes, inscripción, información: Solicítela en Secretaría.

TELEFONO

Servicio telefónico local disponible en Secretaría.

TICKETS ADICIONALES

Para almuerzos Q60.00 c/u en Secretaría. Cerciórese que al inscribirse le entreguen dos tickets de almuerzo. Si los extravía, su reposición cuesta Q60.00 c/u en Secretaría.

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Leche entera
Para todas las aplicaciones donde se necesita leche 100% pura de alta calidad, empacada con gas para incrementar su vida en la bodega al doble de una leche empacada convencionalmente.

Leche descremada
Para aplicaciones donde se necesita leche 100% pura, con bajo contenido de grasa, sabor limpio y con una excelente solubilidad. Disponible en diversos rangos de temperaturas.

Sólidos de mantequilla en polvo
Alto en fosofolípidos, buen sabor cremoso, baja cuenta en termófilos, excelente solubilidad, contenido graso constante.
Aplicaciones:
- La mejor alternativa a los sólidos no grasos de leche en helados.
- Productos ultra pasteurizados para mejorar el sabor.
- Recombinación de leche evaporada y condensada-azucarada.
- Aderezos para ensaladas y sopas cremosas enlatadas.
- Productos de panificación

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Concentrados de proteína láctea
El MPC-70 es un concentrado de proteína láctea secado por aspersión. La leche descremada se concentra por ultrafiltración, hasta un 70% de proteína en el producto terminado. El MPC-70 es totalmente natural, no contiene aditivos ni preservantes.
Se usa especialmente para la fabricación de quesos blancos recombinados y/o imitación. Disponible en diferentes concentraciones.

Suero de leche
El suero de leche grado extra es producido a partir de suero de quesería y secado por aspersión. Esto resulta en un polvo fluído, no higroscópico que cumple con las especificaciones del Insututo de Productos de Suero para ser "grado extra".
Excelente como fuente de proteínas en formulaciones para infantes, como sustituto de leche en polvo descremada en productos de panificación, yogurt, confitería y helados.

Grasa butírica anhidra
Elaborada a partir de crema fresca, rica en carotenoides.
Inmejorable fuente de sabor para quesos procesados, la mejor alternativa a la crema en helados; excelente funcionalidad en recombinación de cremas y mantequillas; para prevenir el revenimiento (blooming) en chocolate de leche.

Mantequilla
Manufacturada con la más alta calidad de crema, libre de químico aditivos, preservantes, adulterantes y otras impurezas. Congelada después de producida para preservar el puro, limpio y fresco sabor la más fina crema de Nueva Zelandia, altamente recomendada en uso de panadería y repostería.

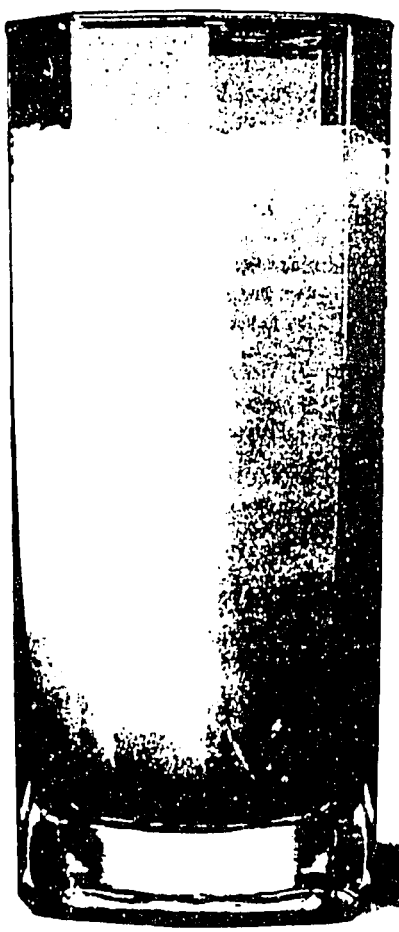
Caseínas ácidas y lácticas
Caseínas con bajo sabor y excelente dispersabilidad, amplia variedad de tamaños de malla, calidad consistente garantizada, grado comestible o industrial. La mejor calidad para extensión de leche para quesos o formulaciones para adhesivos.

Caseinatos de calcio
Perfil de sabor limpio, buena dispersabilidad, baja viscosidad, alta opacidad.
Aplicaciones:
- Alimentos que requieran de cuentas bajas de esporas termofílicas, tales como los procesados en autoclave.
- Productos nutricionales: bebidas dietéticas, complementos nutricionales que demanden buena dispersión y apariencia lechosa.
- Coberturas para confitería fortificadas, que requieran baja retención de humedad.
- Formulación de productos bajos en sodio y altos en calcio, que requieran de mucha opacidad y fácil dispersión.
- Bebidas en polvo para reconstituir que requieran de alta dispersabilidad.

Crema en polvo
Es la unión de crema fresca y leche deshidratada, por proceso de spray. Ideal para fabricación de helados, chocolates y sopas.

Cuajada congelada
La cuajada es congelada después de 72 horas de fabricación, por lo que conserva un sabor suave, ligeramente láctico y un cuerpo firme.
Su uso recomendado es para materia prima para quesos procesados.

Otros ingredientes lácteos
Tenemos el producto especialmente diseñado para sus necesidades específicas. Consúltenos.



Cómo obtener al menos 12 productos de un vaso de leche

Sólo aplicando las más avanzadas tecnologías en procesamiento de leche se pueden obtener una amplia variedad de subproductos lácticos para uso de la industria en general, que garanticen alta eficiencia a bajo costo. Desde Nueva Zelandia, New Zealand Milk Products importa subproductos lácticos estandarizados para los diferentes procesos de producción y también es capaz de elaborar nuevos productos que se ajusten a las necesidades específicas de cada cliente. Llame ahora y pida una solución a su necesidad.

NEW ZEALAND MILK PRODUCTS

5a. Calle 2-48 Zona 9, Guatemala • Tels.: 344884 al 86. Fax: 325107.

45

CONCEPTOS FUNDAMENTALES RESPECTO DE CALIDAD TOTAL*

*Lic. Héctor Torres López

Todos nos hemos familiarizado acerca de los conceptos fundamentales respecto del tema de la Calidad Total. En tal sentido, hemos avanzado mucho. Nos toca ahora comenzar a producir resultados (en aquellos casos que no se hayan comenzado a obtener ya).

Pero antes repasemos un poco respecto de los conceptos fundamentales para ver si realmente estamos todos de acuerdo. Intentaré a través del presente artículo, resumir los conceptos fundamentales respecto del tema "Control Total de la Calidad".

1. DEBE HABER UN COMPROMISO CON LA CALIDAD

Es necesario considerar a la Calidad como **parte esencial del proceso gerencial.**

Este "Considerar a la Calidad como parte esencial" debe formar parte de la misión de la Empresa; implica contar con estrategias específicas dirigidas hacia el mejoramiento continuo de la Calidad, debe estar entre los objetivos de la Alta Gerencia, formar parte de los Planes y Programas de la Gerencias Medias, ser parte del compromiso y del interés de las Jefaturas y ser uno más, si no el principal, de los intereses y entusiasmos del personal (todos ellos, no sólo del personal del área de producción).

Este "Compromiso con la Calidad' se debe respirar a todos los niveles y en todos los sectores; debe ser como la sangre que circula por las venas de nuestra Institución o Empresa. El "Compromiso con la Calidad" debe ser un valor compartido a todo lo largo y a todo lo ancho de toda nuestra Institución o Empresa.

Continúa en página 6

SABOR

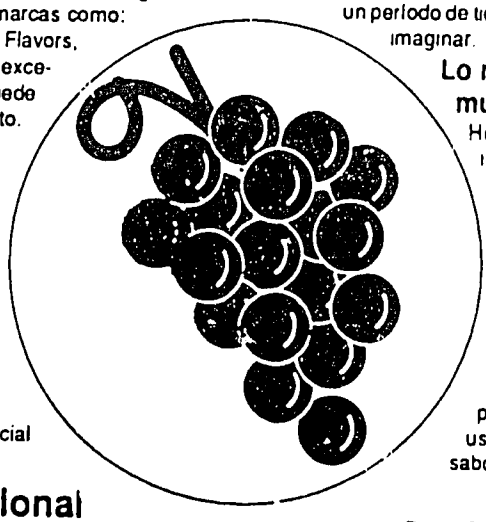
Una pequeña muestra de lo que podemos hacer.

Universal Flavors International es una compañía que posee un mundo de experiencia, más de 80 años de gran éxito en las industrias de bebidas gaseosas, productos lácteos y alimentos en general. Forma parte de un grupo de renombradas marcas como: Hurty-Peck, BlankeBaer, Templar, Fantasy Flavors, Flavorshades; todas ellas sinónimos de gran excelencia. Sin embargo, Universal Flavors puede hacer mucho más que darle sabor a su producto. ¡Mucho más!

Sabores son sólo el principio.

Nuestros profesionales toman el "producto" de su imaginación y lo llevan hasta las estanterías donde será adquirido por el consumidor final.

Darle su propia personalidad al sabor es solo el punto de partida. Nuestros servicios incluyen también el desarrollo de conceptos para su producto, así como asesoría en el mercadeo y la comercialización del mismo. Prestamos apoyo técnico durante el período inicial de la producción, asesoramos sobre la introducción de tecnologías nuevas como el sistema STABILAC de Acidificación Directa, aceites naturales Templar, aceites esenciales, etc., y disponemos de asistencia para el diseño de envases. Este proceso es realizado en un período de tiempo mucho más corto de lo que usted se pudiera imaginar.



Lo realizamos todo alrededor del mundo.

Hemos desarrollado una red mundial de instalaciones para la fabricación y venta de nuestros productos. Esta red mundial ha sido realzada con la adquisición de las instalaciones de Felton Worldwide en Inglaterra, Francia, Italia, Méjico, Hong Kong, Japón y Tailandia. Es por ello que nuestra experiencia se encuentra donde la necesita, cuando la necesita.

Universal Flavors Internacional posee un mundo de experiencia. Permítanos darle una pequeña muestra de lo que podemos hacer por usted. Pongase en contacto con nosotros. Para sabores, extractos y mucho más.

Universal Flavors International
Edificio Centro Empresarial
5a. Avenida 15-45 zona 10, Torre I, Piso 6, Of.#605
Tels.: (502-2) 37-4214 & 37-4217
Fax: (502-2) 33-7053
Apdo. 98-F, Guatemala City, Guatemala, C. A.

UNIVERSAL FLAVORS
A UNIVERSAL Foods COMPANY

2. TODOS DEBEMOS ENTENDER QUE ES LA CALIDAD

¿Qué es Calidad? Calidad **es cumplimiento de requisitos.**

Control Total de la Calidad es, primariamente, cumplimiento total de requisitos. Esos requisitos son primordialmente "estándares" (objetivos alcanzables), complementados por métodos, normas, procedimientos, formas preestablecidas de operar, etc. Calidad Total representa haber alcanzado el 100% o el 0% de algo. Si Calidad es cumplimiento de requisitos, ¿Qué es lo primero que debemos hacer?: **Fijar los Estándares.**

Es tremendamente importante que esto quede bien claro. El compromiso filosófico está OK. El compromiso filosófico es importante. Pero si no comenzamos a materializar el concepto de Calidad Total a través de la fijación de estándares....no habremos avanzado nada.

Además, los estándares deben ser los más altos posibles, dentro de lo razonable. Además, debemos ir mejorando los estándares a medida que son alcanzados (sin volvernos locos por supuesto....siempre dentro de una razonable relación costo - beneficio).

Debemos recordar que **el desempeño de las personas estará de acuerdo a los estándares que les fijen sus líderes.** Es responsabilidad de los líderes establecer dichos estándares. Si sus estándares son altos probablemente sean altos los logros. Si sus estándares son bajos, probablemente sean pobres los logros.

Pero también hay allí, en el fondo, atrás del todo, un "estándar deseado". Específicamente, su trabajo tiene que ser hecho con cero errores, su producto tiene que ser hecho con cero defectos, su despacho tiene que ser atendido con cero demoras, su proceso tiene que completarse con cero desperdicio. Si no se ha logrado el cero absoluto aún, debe establecerse el % de errores, o defectos, o demoras, o desperdicios, que se consideran aceptables en cada caso.

Debe haber estándares perfectamente definidos que dejen claramente identificado cuando se ha alcanzado la Calidad deseada, y cuando no. Ah, y debe monitorearse bien de cerca cuál es la realidad (versus la meta o el estándar).

Todas las personas deben comprender, saber, darse cuenta, cuando han hecho un trabajo o producto con calidad....y cuando no.

3. EL CLIENTE (O USUARIO) DEFINE LA PAUTA RESPECTO DE LA CALIDAD

La Calidad es **comenzar escuchando al cliente.** La Calidad debe ser la que demanda el Cliente, y no la que idealiza el Encargado de Calidad Total. La Calidad Total es la que realmente desea el Cliente y no necesariamente la que entiende o nos transmite nuestro Vendedor. Debemos escuchar directamente al Cliente.

Cuál es la razón de su existencia?. Satisfacer a su Cliente (o su Usuario). Quién le reconoce un trabajo bien hecho o un trabajo mal hecho?: Su Cliente (o su Usuario). Si no ha hecho algo bien, si no ha hecho algo con la Calidad debida, quién se resiente?: Su cliente (o su Usuario). Entonces, ¿Quién es la primera persona a tener en cuenta en la fijación de estándares?: Su Cliente (o su Usuario), ¡Por supuesto!

Y créalo.... su Cliente o Usuario seguramente demanda la mayor Calidad posible. Siempre hay en ellos un permanente deseo de mejora. Siempre hay en ellos una definida preferencia por las cosas de mayor Calidad. Y siempre hay, créalo, una mejor manera de hacer las cosas.

4. PENSEMOS EN LA PREVENCIÓN COMO ESTRATEGIA DE CALIDAD.

La estrategia debe ser, **primariamente prevención**...de defectos o de problemas, o de costos excesivos.

¿Cómo podemos prevenir la ocurrencia de este error?. ¿Cómo podemos prevenir los problemas que están originando estas devoluciones?; ¿Cómo podemos prevenir las insatisfacciones que están derivando en estos reclamos?; ¿Cómo podemos prevenir estos costos originados en repeticiones o reiteraciones?.

Recordemos que Calidad Total es **hacer bien las cosas desde la primera vez..**

5. DEBEMOS TODOS ESTAR DISPUESTOS A TRABAJAR CON GANAS EN EL MEJORAMIENTO DE LA CALIDAD.

Cada uno de nosotros es el país o la Compañía. Y **debemos desarrollar en cada uno de nosotros el hábito de hacer bien las cosas**

Sigue en página 14

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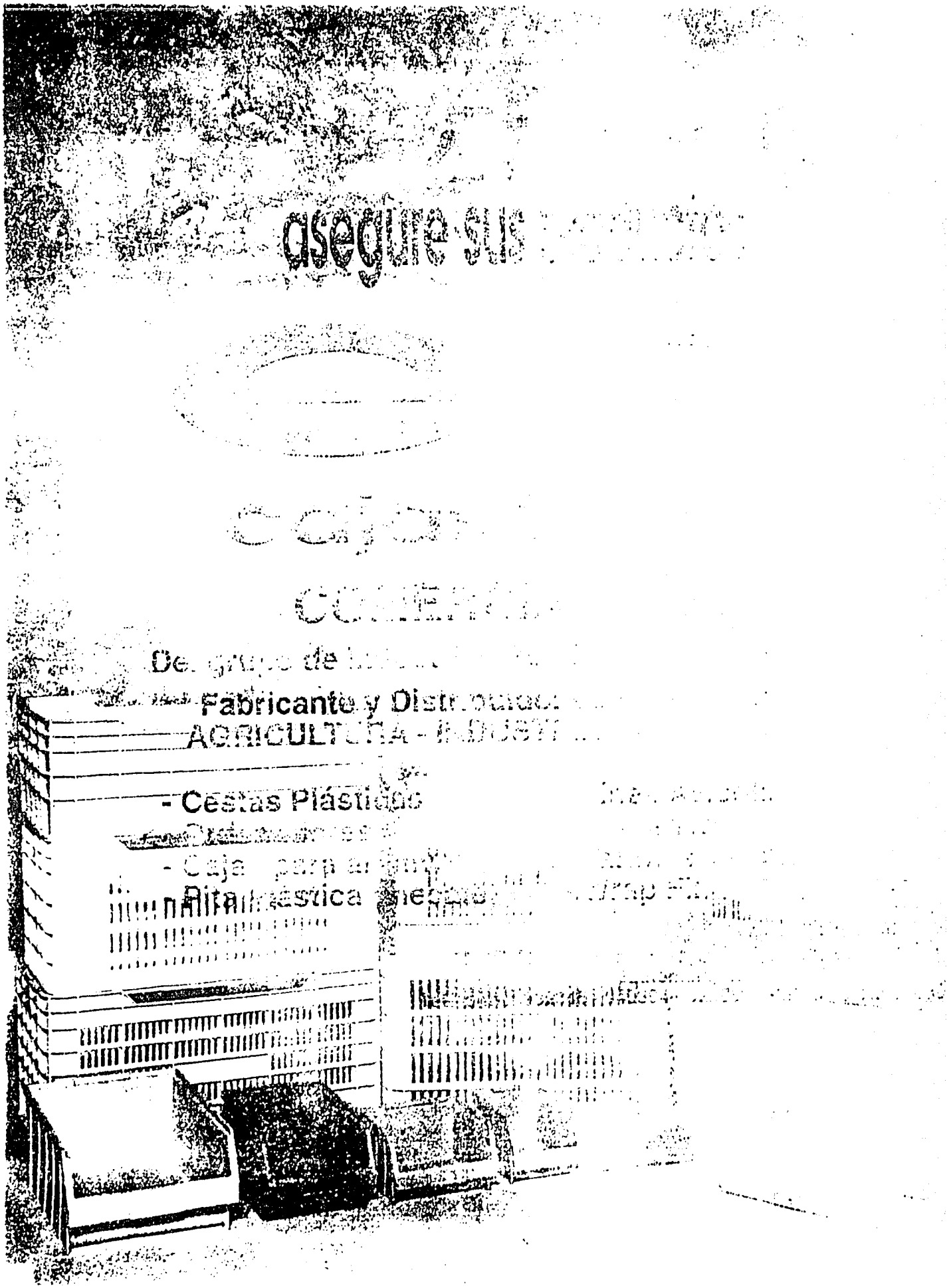
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AGRICULTURA - INDUSTRIA
- Cestas Plásticas
- Caja para
Bita plástica

PROGRAMA DE CONFERENCIAS
II CONGRESO NACIONAL DE LA INDUSTRIA ALIMENTARIA Y EXPOSICION INDUSTRIAL - AGTA'94-
¿ESTAMOS PREPARADOS PARA COMPETIR?
Hotel El Dorado, Guatemala 20 - 23 Abril de 1994.

Miércoles 20 de abril - 19:00 Hrs.

CEREMONIA INAUGURAL Y CONFERENCIA INAUGURAL

del Sr. Anthony Adams, Director de Global Marketing Information para The Coca Cola Company.
Tema: Mercadeo Global; un reto para la Industria de Alimentos.

INAUGURACIÓN DE LA EXPOSICIÓN INDUSTRIAL Y COCKTAIL INAUGURAL

Cortesía de Alimentos Kern de Guatemala.
Bebidas cortesía de Importadora y Distribuidora Izabelle.

Jueves 21 de abril - 8:00 a 12:30 Hrs.

SIMPOSIUM: LOS RETOS DE LA GLOBALIZACIÓN Y LA APERTURA DE MERCADOS.

8:00 a 8:35 La industria guatemalteca ante la globalización y apertura de mercados; invasión de productos Vrs. oportunidades para nuestros productos. Lic. José Orive, representante permanente de Guatemala para la incorporación de Centro América al TLC Norteamericano, Guatemala.

8:40 a 9:25 Efectos de la globalización y Tratados de Libre Comercio en la Industria Nacional de Alimentos. Ing. Eduardo Sperisen, Director Ejecutivo, Cámara de Industria de Guatemala, Guatemala.

9:30 a 10:10 Estudio de un caso: Competitividad de las empresas centroamericanas fabricantes de jugos y néctares. Estudio patrocinado por BID, FEDEPRICAP Y GEXPRONT. Ing. Luis E. Reyes, Guatemala.

10:15 a 10:35 Coffee Break cortesía de THE QUAKER OATS, Co., en el área de Exposición.

10:35 a 11:05 Respuesta de la Industria Nacional de Alimentos ante la apertura de mercados. Sr. Jorge Luis Cabrera, Gerente de Mercadeo, Fábrica de Productos PETER PAN, Guatemala.

11:10 a 12:00 Mesa Redonda: ¿Estamos preparados para competir?. Participantes: Lic. José Orive, Ing. Eduardo Sperisen, Ing. Luis Reyes, Sr. Jorge Luis Cabrera y Anthony Adams. Moderador: Lic. Clark MacDonald, AGTA.

12:00 a 13:00 Período especial para visitar la Exposición Industrial.

Jueves 21 de abril - 14:00 a 17:45 Hrs.

SIMPOSIUM: CALIDAD TOTAL EN LA INDUSTRIA DE ALIMENTOS.

14:00 a 14:45 ¿Qué es Calidad Total?; su filosofía, sus métodos. Dr. Jorge Arturo Pérez Monge. Entrenamiento para la Calidad /E.P.C./ Pérez Monge y Asociados, Puebla, México.

14:45 a 15:25 Sistema de control de puntos críticos (HACCP) en la Industria de Alimentos. Damian Gabis, Director Ejecutivo de Silliker Laboratories Group, Inc., Estados Unidos.

15:25 a 16:10 ¿Cómo implementar un Programa de Calidad Total en una Industria de Alimentos?. Dra. Mary Wagner, Directora de Investigación y Desarrollo, Calidad y Operaciones Regulatorias de Gorton's División de General Mills, Inc., Estados Unidos.

16:10 a 16:30 Coffee Break en el área de Exposición.

16:30 a 17:05 Experiencias en la Industria Nacional de Alimentos, en la implementación de Programas de Calidad Total. Ing. Sergio Morales, Gerente de Programa de Calidad Total de Licorera La Nacional, Guatemala.

17:05 A 17:45 Foro de discusión: ¿Estamos preparados para la Calidad Total en la Industria Nacional de Alimentos?. Participantes: Dr. Jorge Pérez Monge, Ing. Sergio Morales, Dra. Mary Wagner, y Dr. Damien Gabis. Moderador: Ing. Rolando Gálvez, AGTA.

17:45 a 19:00 Período especial para visitar la Exposición Industrial en el Salón Los Reyes.

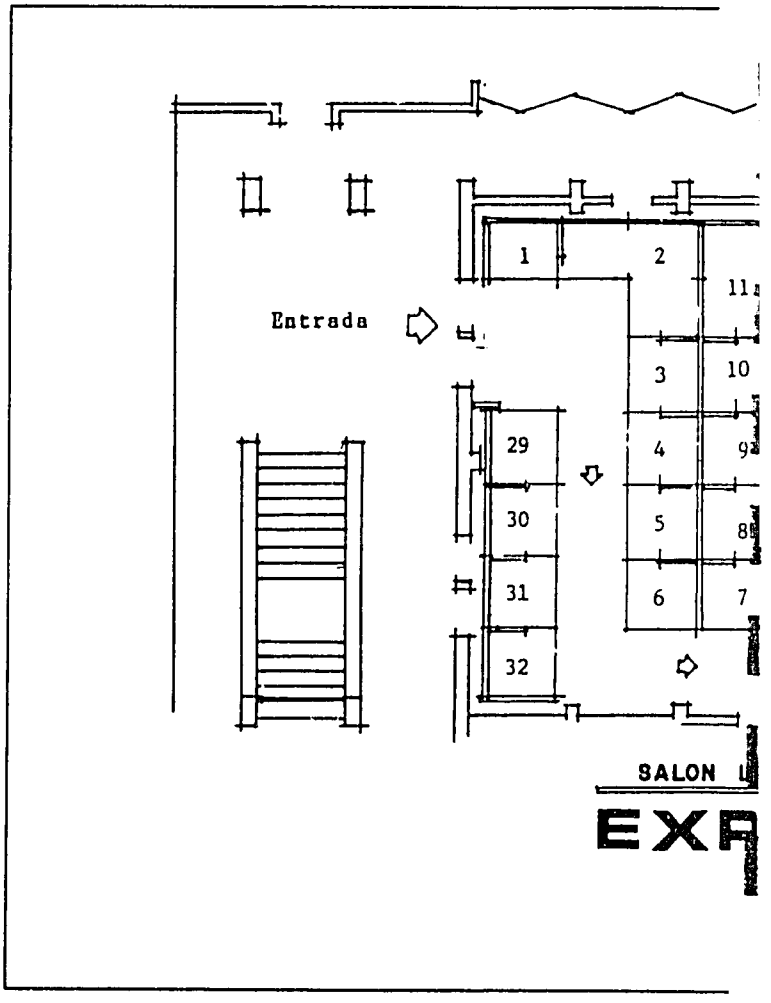
Viernes 22 de abril - 8:00 a 12:30 Hrs.

TEMAS DE ESPECIAL INTERES PARA LA INDUSTRIA ALIMENTARIA

8:00 a 8:40 Normas ambientales y conciencia ambientalista: ¿Cómo afectarán a la Industria de Alimentos?. Lic. Jorge Cabrera, Director Ejecutivo, Comisión Centroamericana de Ambiente y Desarrollo, Guatemala.

(Continúa en página 12)

EMPRESAS PARTICIPANTES EN LA EXPOSICION INDUSTRIAL AGTA'94



No. Stand

1. ALEJANDRO VALDIVIESO Y RICKY LOPEZ
Fotógrafos profesionales especializados en fotografía de alimentos y de procesos industriales.

2. AROMA/UNGERER & COMPANY
Sabores y colores.

3 y 4 REPRESENTACIONES DEL CARIBE
Materia prima y maquinaria, sabores y sazonadores, gomas naturales, cocoa, productos químicos e ingredientes, cuajos y cultivos para la industria láctea y colores.

5. BASSCULAS REVUELTA.
Básculas.

6. RECASA
Maquinaria industrial, materia prima, equipo de filtración por membranas, etc.

7. UNIVERSAL FLAVORS
Materia prima para la industria alimenticia (sabores en general).

8. GRUPO SIGMA/GU
Papeles, empaques y afines, principalmente en el mercado centroamericano, con exportación a nivel mundial.

9. FLACHSMANN
Aromas y sabores y productos terminados.

10. PRODUCTOS DIVERSOS (PRODISA)
Sabores naturales y artificiales para la industria de helados, refrescos, dulces, chicles, gelatinas, jugos, salsas, sopas, snacks, bases para salsas, galletas, chocolates, margarina, miel, cereales, etc.

12, 13 y 14 SIDASA
Maquinaria para la industria alimenticia.

15 y 16. VIDRIERA GUATEMALTECA, S.A. (VIGUA)
Envases de vidrio.

17 y 18. SABORES COSCO DE GUATEMALA, S.A.
Colorantes naturales y artificiales, esencias, sabores naturales, gomas, estabilizadores y otros.

19. RHONE POULENC
Aditivos para la industria alimenticia.

20. COMERCIAL PEPE DEL GRUPO DE INDUSTRIAS PEPE
Cestas plásticas, cajas para archivo, film (plástico auto-adherible para empaque de

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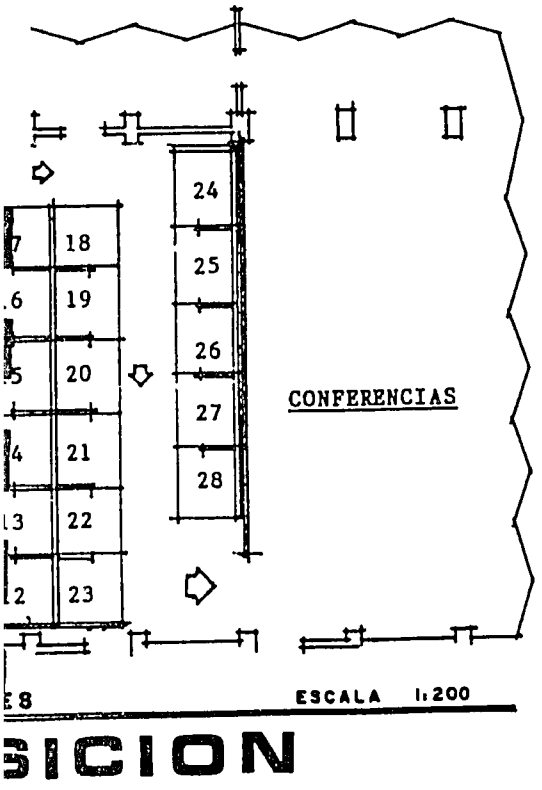

27 Y 28. IMPORTADORA Y DISTRIBUIDORA IZABELLE
Vinos y licores importados.

29. QUIMICA REITZEL, S.A. (QUIRSA)
Goma xanthan, preservantes, fosfatos, ácido cítrico, sodio citrato, fragancias y aromas.

30. MERCK CENTROAMERICANA, S.A.
Reactivos, productos para diagnóstico microbiológico, desinfectantes, productos químicos para la industria alimenticia.

31. POLICA, S.A.
Artículos de duropor (vasos, tacitas, platos, depósitos de comida, bandejas, porta-huevos, paneras, hieleras, cajas de cartón con duropor para exportación de alimentos).

32. AMERICA COMERCIAL, S.A.
Etiquetas autoadhesivas, etiquetadoras para precio, vencimiento y producción, sistemas de código de barras, balanzas electrónicas que trabajan en red, scanners y verificadores e impresoras.

alimentos), línea avícola, ordenadores, máquinas para uso de film, máquinas para uso de termoencogible, tarimas plásticas.

21. ALIMENTOS, S.A.
Proteína de soya texturizada (PROTEMAS)

23. SISTEMAS DE PESAJE, S.A. (SIPESA)
Básculas y balanzas.

24 y 25 NEW ZEALAND MILK PRODUCTS
Productos lácteos en general (quesos, mantequilla, leche, grasa butírica, caseína, proteína, etc.).

26. PREXIM, S.A.
Ingredientes para la industria alimenticia.

Regia

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8:45 a 9:25 Residuos de pesticidas en alimentos procesados: Una barrera para la exportación de productos a Estados Unidos. Christine Chaisson, Directora, Technical Assesment Systems Inc., Estados Unidos.

9:30 a 10:10 Aplicaciones de la biotecnología en la Industria de Alimentos. Ing. Francisco Calzada, ICAITI, Guatemala.

10:15 a 10:35 Coffee Break en el área de Exposición.

10:35 a 11:10 Nuevos productos alimenticios fabricados en Guatemala. Ing. Rodolfo Bressani, AGTA, Guatemala.

11:15 a 11:55 Tendencias del mercado mundial de productos alimenticios. Douglas Guimaraes Universal Flavors, Guatemala.

12:00 a 13:00 Período especial para visitar la Exposición Industrial.

Viernes 22 de abril - 14:00 a 17:30 Hrs.

SIMPOSIUM: SOYA PARA LA INDUSTRIA DE ALIMENTOS

14:00 a 14:10 Inauguración. Sr. Grant Pettrie, Agregado Agrícola, Embajada de Estados Unidos en Guatemala.

14:10 a 14:15 Introducción. Ing. Carlos Rafael Anzueto, Asociación Americana de Soya, Guatemala.

14:15 a 15:05 Alimentos innovadores a base de soya, en el mercado internacional. Peter Golbitz, Soyatech / Asociación Americana de Soya, Estados Unidos.

15:15 a 15:50 Desarrollo y evaluación de mezclas de maíz tierno (elote) y leche de soya en bebidas tipo atol. Dr. Ricardo Bressani, Centro de Investigación de la Universidad del Valle de Guatemala, Guatemala.

16:00 a 16:15 Coffee Break en el área de Exposición, cortesía de La Asociación Americana de la Soya.

16:15 a 17:05 Uso de la proteína de soya en sistemas de carnes procesadas. Dr. Russ Egbert, Archer Daniels Midland (ADM), Estados Unidos.

17:15 a 17:50 Proteínas de soya en bebidas, leches y lácteos procesados. Ing. Patricia Ayala, Productos Alimenticios Delicias / Asociación Americana de Soya, México.

18:00 a 19:00 Período especial para visitar la Exposición Industrial. 19:00 Hrs. Clausura oficial de la Exposición.

Sábado 23 de abril - 8:00 a 10:20 Hrs.

SESIONES SIMULTANEAS

SESION No. 1 - Salón María del Rosario:

8:00 a 8:20 Desarrollo de una agroindustria rural femenina en la región de Totonicapán, Guatemala. Ing. Florence Tartanac, INCAP.

8:20 a 8:40 Deshidratación de la pulpa de zapote por procesos combinados. Carlos Pinto, Universidad del valle de Guatemala.

8:40 a 9:00 Desarrollo de un alimento para niños, a base de amaranto (A. Cruentos). Alma Ortíz, Universidad del Valle de Guatemala.

9:00 a 9:20 Extracción y cuantificación de las proteínas del grano de amaranto y fracciones físicas obtenidas por molienda abrasiva y tamizado. María Ester Búcaro, Universidad del Valle de Guatemala.

9:20 a 9:40 Preparación de un concentrado proteínico y de aceite del gérmen del grano de amaranto. Karen Wirst, Universidad del Valle de Guatemala.

9:40 a 10:00 Avances y aplicaciones de la Ingeniería Genética de Plantas en la producción y procesamiento de Alimentos. Dr. Luis Mejía, Universidad de San Carlos de Guatemala.

10:00 a 10:20 Coffee Break.

SESION No. 2 - Salón Emperador:

8:00 a 8:20 Films comestibles. Luz Marie Ortega, Universidad del Valle de Guatemala.

8:20 a 9:00 Normas de identidad y calidad para leche de soya y productos derivados. Peter Golbitz, Soyatech / Asociación Americana de Soya, Estados Unidos.

9:00 a 9:40 La soya en la industria mexicana de alimentos. Ing. Antonio Mouret, Nutrimex, S.A., México.

9:40 a 10:00 La soya en panificación. Lic. Adela Pérez Delgado, Asociación Americana de Soya, México.

10:00 a 10:20 Coffee Break

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SESION No. 3 - Salón María del Cármen

8:00 a 8:40 Programa de capacitación continua para el personal de la industria de alimentos INCAP / AGTA / SUSTAIN. Dr. Luis Elías, INCAP.

8:40 a 9:20 Tratamiento de aguas residuales en una destilería. Ing. Jaime Pinzón, Gerente General de Destilería de Alcoholes y Rones y Gerente General de Central de Bebidas Finas, Guatemala.

9:20 a 10:00 Publicidad de productos alimenticios. Walter Brolo, FCB Publicidad, Guatemala.

10:00 a 10:20 Coffee Break.

Sábado 23 de abril - 10:20 a 13:00 Hrs.

SESION UNICA, SALON EMPERADOR

MESA REDONDA: EL PAPEL DE LA UNIVERSIDAD Y LA INDUSTRIA EN LA FORMACION DE PROFESIONALES DE LA TECNOLOGIA DE ALIMENTOS

PONENCIAS:

10:20 a 10:40 Situación de la carrera de Ingeniería y Ciencia de Alimentos en Guatemala. Dr. Ricardo Bressani, Investigador Asociado, Universidad del Valle de Guatemala.

10:40 a 11:00 La Universidad como formadora de Recursos Humanos. Ing. Héctor Centeno, Rector, Universidad del Valle de Guatemala.

11:00 a 11:20 El rol de la industria en la formación de Recursos Humanos. Representante de la Industria de Alimentos (por confirmar).

11:20 a 11:40 Opciones académicas para preparar el profesional de la Tecnología de Alimentos. Dr. Raúl González, Decano Facultad de CC y HH., Universidad del Valle de Guatemala.

11:40-13:00 Discusión y Conclusiones

PANELISTAS INVITADOS

13:00 Cocktail de Clausura, Cortesía de Asoc. Americana de Soya e Importadora y Distribuidora Izabelle.

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COMITE ORGANIZADOR AGTA'94

PRESIDENTE .....Lic. Clark MacDonald

COORDINADOR CIENTIFICO.....Dr. Ricardo Bressani

DIRECTORA EJECUTIVA.....Ana del Rosario de Quintero

Ing. Rodolfo Bressani

Ing. Juan Antonio Busto

Lic. Luis Alfredo García

Ing. Ana Imeri

Ing. Beatriz Matzdorf

Lic. Juan Carlos Morales

Ing. Luz Marie Ortega

Viene de página 6

directamente desde la primera vez. Que se desea que así suceda, debe ser el compromiso de los Gobernantes o de la Gerencia. Pero que se logre, es la responsabilidad de cada uno de nosotros.

La Gerencia y las personas que trabajan en una Institución o Empresa deben trabajar duro, realmente duro, para mejorar gradualmente la Calidad.

Si el desperdicio el mes pasado fue del 3.2%, este mes debiera ser 3.1%.... o aún menor. Si atendimos 40 reclamos el mes pasado, este mes deben bajar a 39.... o aún menos. Si produje 432 piezas correctas el mes pasado, este mes debo producir 433 piezas correctas.... o aún más.

La permanente insatisfacción con los logros ya alcanzados es el motor que hace que el proceso continúe y que nos permite darnos cuenta que aún no habíamos llegado a la meta final.

6. CALIDAD TOTAL NO TERMINA EN CASA

Calidad Total no termina en casa. Es más, casi diríamos que comienza fuera de nuestra casa. Tenemos la obligación de "mirar hacia afuera". **Calidad total comienza con nuestros proveedores.**

No podremos brindar a nuestros clientes un producto de calidad si nuestros proveedores no nos suministran un producto de calidad. No podremos brindar un Servicio de Calidad si no recibimos un Servicio de Calidad de nuestros proveedores.

Debemos tener estándares también para nuestros proveedores. Nuestra lucha debe incluir la búsqueda de un compromiso con la Calidad por parte de nuestros proveedores. Nuestros proveedores deben cumplir con requisitos.

Debemos comprender que, así como nuestro cliente define la pauta respecto de la Calidad, **nosotros como clientes de nuestros proveedores les debemos definir la pauta respecto de la calidad a nuestros proveedores.** Independientemente del tipo de proveedor, puede ser una Empresa Gubernamental o una

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Empresa del Sector Privado. Todos nuestros proveedores deben estar dispuestos a trabajar con ganas en el mejoramiento de la Calidad.

Debemos calificar a nuestros proveedores. Debemos descalificar -si nos fuere eso posible- a aquellos de nuestros proveedores que no cumplen con los requisitos, que no alcanzan los estándares de Calidad que les establecimos, que no satisfacen la pauta que les fijamos.

Si nuestros proveedores no cumplen y no podemos cambiarlos, debemos exigirles que cumplan, o debemos ayudarles a que cumplan, o debemos asesorarlos o asistirlos para que cumplan, o debemos hacerles ver los problemas que nos ocasionan y, en la medida de lo posible, responsabilizarlos.

7. A MEDIDA QUE AVANCEMOS NOS DAREMOS CUENTA QUE NUESTROS PERSONAL ESTÁ CADA VEZ MÁS SATISFECHO Y ORGULLOSO.

Es verdad. **A mayor calidad, mayores satisfacciones, mayores calificaciones, mayor orgullo, mayores retribuciones.** Los logros alcanzados en materia de Calidad se materializan en menores costos, mayor rentabilidad, menores reprocesos, menores dudas sobre qué hacer o dejar de hacer, menores irritantes demoras, menores indeseables reclamos o devoluciones, menores defectos que nos avergüenzan, menores errores que nos fastidian y nos hacen sentir incompetentes, mejor servicio que nos hace sentir felices, etc.

8. CONQUISTEMOS TODOS EN NOMBRE DE LA CALIDAD

Control Total de la Calidad **no se origina en el Departamento de Calidad.**

Debe involucrar y comprometer a todos los Departamentos (Compras, Fabricación, Distribución, Servicios Administrativos, Administración de Personal, Cobranzas, Ventas, Procesamiento de Datos, Mantenimiento, Auditoría Interna, Cobros, Finanzas, Investigación, Laboratorios de Control, Importaciones, Exportaciones).

Calidad Total **involucra a toda la Empresa, a todas las Gerencias y a todas las personas, a nuestros Proveedores, a nuestros Clientes, a los Colegios y Universidades que califican a nuestro personal, a los Grupos Técnicos que ayudan a establecer estándares.**

Calidad Total tiene que ver con productos, con sistemas y/o formas de trabajo, con promociones de venta, con administración en general, con trabajo secretarial, con servicios de vigilancia, con computación, con servicios de luz, con correo, con teléfonos, con comunicaciones, con planeación, con la forma en que archivamos, etc.

Control Total de la Calidad no se refiere sólo a Productos y Procesos. **Debe referirse a instalaciones físicas, a equipos, a materiales, a sistemas, procesos y métodos, a servicios, a cultura organizacional, etc.**

Se requiere una **participación gerencial activa.** Es recomendable reunirse por lo menos semanalmente, comenzar preguntándose qué debemos hacer en nombre de la calidad, y continuar reuniéndonos y trabajando regularmente, sin pausa. Siempre hay una mejor manera de hacer las cosas. recordémoslo.

Es recomendable **contar con programas originales** a todo lo largo de la implementación del proceso de Control Total de la Calidad (empezando con el primer "Programa Original" al comenzar el proceso).

9. LA CALIDAD ES UN PROCESO, NO UN PROGRAMA.

¿Cuándo habremos alcanzado la Calidad Total?

Control Total de la Calidad casi se podría decir que es un proceso sin fin. Control Total de la Calidad **es un proceso que se desarrolla en años de trabajo duro.**

Si es así, ¿qué esperamos para comenzar ya?. El camino más largo comienza con el primer paso. Si ya hemos comenzado, estamos continuando en la búsqueda del mejoramiento de la Calidad?

10. CALIDAD TOTAL ES SINÓNIMO, TOTAL Y ABSOLUTAMENTE, DE SATISFACCIÓN TOTAL.

Satisfacción Total en relación con nuestros Clientes, pero también Satisfacción Total en relación con nuestro Personal, y Satisfacción Total por parte de nuestros Proveedores, Accionistas, Gobierno, en fin, todos.

Calidad Total generalmente comienza con acciones correctivas, corrigiendo errores y costos excesivos.

Calidad Total generalmente continúa previniendo errores, insatisfacciones, costos excesivos.

Pero, se desarrolla con acciones creativas. Implica pensar en proteger el medio ambiente, mejorar la calidad de vida, cuidar la higiene y salubridad, mejorar las condiciones laborales de los trabajadores, trabajar en grupo para brindar mejores servicios, mejorar los servicios públicos.

Puede requerir de nuevas tecnologías, o de innovaciones tecnológicas o de programas integrales de reconversión.

Continúa en página 1

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¿QUE ES AGTA?

La Asociación Guatemalteca de Tecnólogos en Alimentos (AGTA), es una entidad privada, científico-tecnológica, cultural y educativa, no lucrativa, apolítica, no religiosa. Agrupa tanto a profesionales como a personas que trabajan en la industria alimenticia y por supuesto a estudiantes de las ramas afines a la misma.

Fue fundada en octubre de 1987 por profesionales que trabajan en la industria alimenticia, que vieron la necesidad de profesionalizar a la industria, cómo adelantar el desarrollo industrial y técnico de nuestro país en el "Area de la Ciencia y Tecnología de Alimentos" trayendo como consecuencia el mejoramiento de la calidad de los alimentos; siendo a la fecha, la única asociación guatemalteca que agrupa a este gremio de profesionales. Goza de personalidad jurídica desde el 13 de agosto de 1991 y cuenta a la fecha con 150 socios individuales y 15 empresas asociadas.

AGTA a su vez se encuentra afiliada al "Institute of Food Technologist (IFT) de los E.E.U.U. y a la Asociación Latinoamericana y del Caribe de Ciencia y Tecnología de Alimentos. (ALCCTA).

Entre los principales objetivos de AGTA se encuentran los siguientes: (a) Elevar el nivel de conocimientos científicos y tecnológicos de los profesionales relacionados con la industria de alimentos; (b) Estimular el intercambio de información e ideas relacionadas con las Ciencias y Tecnología de Alimentos, así como la colaboración técnico científica entre los sectores involucrados, mediante la organización periódica de seminarios y conferencias; (c) Proveer y difundir las investigaciones en la Ciencia y Tecnología de Alimentos; y, (d) Operar como organismo de opinión y asesoría en materias relacionadas con la Ciencia y Tecnología de Alimentos.

AGTA, edita bimensualmente la revista informativa de la Asociación, con noticias científicas y tecnológicas de importancia en la Industria de Alimentos del país y del área de Centro América, así como eventos a realizarse en el ámbito de la Ciencia y Tecnología de Alimentos. La Revista acepta para su publicación artículos relevantes a esta área de la ciencia y publica además gratuitamente, noticias y empleos disponibles y eventos de otras asociaciones similares. La revista se distribuye al personal de la Industria Alimentaria de Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica y Panamá.

Actualmente AGTA está organizando el Segundo Congreso de la Industria de Alimentos -AGTA 94-, a realizarse del 20 al 23 de abril de 1994 en el Hotel "El Dorado". Todo se encuentra listo para que por segunda vez en Guatemala se den cita industriales y empresarios, técnicos y profesionales, científicos y estudiantes, proveedores e interesados del fascinante mundo de los alimentos. El reto lo tomó AGTA en 1992, sin embargo, el compromiso es de todos los que estamos empeñados en producir alimentos en cantidad suficiente y de calidad óptima para la población guatemalteca.

Si desea mayor información sobre como asociarse a AGTA, búsquenos en el stand número 1, solicítela al Apartado Postal 8F 01910, Guatemala, Guatemala, o con el Lic. Luis Alfredo García, actual Presidente de la Asociación, al teléfono: 562222

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Viene página 16

En fin, Calidad Total es una Cultura. **Calidad Total es un estilo de vida.**

En la medida que todos vivamos reclamando Calidad Total, trabajaremos todos por comprometernos cada día más con la Calidad y lograremos un mejor estilo de vida.

CALIDAD TOTAL POR TODOS ES SINONIMO DE SATISFACCION TOTAL PARA TODOS.

RESUMEN

Qué le parece este anuncio a colocar en todos los rincones de su Empresa o Institución?

En esta Empresa (o Institución)

- Tenemos un compromiso con la Calidad y requerimos que todos tengamos un compromiso con la Calidad.
- Entendemos todos ¿Qué es la Calidad?. Sabemos que usted señor Cliente nos puede ayudar, demandándonos cada vez más Calidad, y sabemos que nosotros podemos ayudar a nuestros proveedores demandándoles más Calidad.
- Pero también sabemos que todos seremos reconocidos más, cuanta mayor Calidad logremos. Sabemos que la Calidad es gratis. Es gratis teniendo en cuenta los enormes beneficios que se derivan de un serio y responsable proceso de Control Total de la Calidad. Es gratis para nosotros. Es gratis para usted, señor proveedor. También será gratis para usted, señor cliente.
- Nosotros conquistaremos en nombre de la Calidad. reconocemos que cumpliremos nosotros, nuestro personal y nuestros proveedores, con los cada vez mayores requisitos de Calidad. Implicará el proceso de tener que trabajar con ganas, por mucho tiempo en el futuro, y estamos dispuestos a continuar trabajando duro y reclamando duro el mejoramiento de la Calidad.
- **CALIDAD TOTAL POR TODOS** es sinónimo de **SATISFACCION TOTAL PARA TODOS.**

NOTICIAS

EMPRESA PANAMEÑA DESEA CONTRATAR PARA TRABAJAR EN PANAMA A: Ing. Tecnólogo en Alimentos con especialización en Productos Lácteos o Ingeniero Mecánico con experiencia en Industria de Productos Lácteos. Experiencia: Mínimo 2 años de experiencia en la Industria Procesadora de Productos Lácteos. Conocimientos amplios de los conceptos de Calidad Total y manejo de personal. Español e Inglés indispensable.
Salario: Según aptitudes.
Favor dirigir su Currícula a

Ing. Luis E. Reyes
Gexpront/Fecaexca / Bid
Ruta 6, 9-21 Zona 4
Edif. Cámara de Industria 6o. Nivel
Guatemala.

DIRECTORIO

Año 6 No. 24 - Enero / Marzo 1994
Publicación Trimestral de la Asociación Guatemalteca de Tecnólogos en Alimentos, Apartado Postal 8F, 01910 Guatemala.
Tiraje 600 ejemplares.

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AGTA es afiliada al Institute of Food Technologists (IFT) y a la Asociación Latinoamericana y del Caribe de Ciencia y Tecnología en Alimentos (ALCCTA).

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Las opiniones vertidas en los artículos no reflejan necesariamente la opinión de AGTA.

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EVENTOS

Abril 13 - 16 — **XXV Congreso Nacional de Ciencia y Tecnología de Alimentos, Acapulco Guerrero, México.** Info. Asociación Nacional de Tecnólogos en Alimentos de México, A.C., Mardel Norte No. 5, Col. San Alvaro, Del. Azcapotzalco, 02090 México, D.F., México. Tel.: 525-514-0531, FAX: 525-514-0691.

Abril 20 - 23 — **II Congreso Nacional de la Industria Alimentaria y Exposición Industrial, AGTA 94.** Hotel El Dorado, Guatemala. Info. AGTA, 5a. Ave. 15-45, Zona 10, Torre I, Oficina 304, Tel. y Fax: 502-233-7024.

Mayo 15 - 18 — **37th Annual Conference of the Canadian Institute of Food Science and Technology, Vancouver, B.C, Canadá.** Info. Michelle Morfitt, CIFST Registration, 3155 Willingdon Green, Burnaby, B.C., Canadá V5G 4P2. Tel. 604-666-1213, Fax: 604-666-3149.

Junio 25 - 29 — **IFT Annual Meeting, Atlanta.** Info. Daniel Weber, Institute of Food Technologists, 221 N. La Salle St., Chicago, Illinois USA 60601.

Julio 8 - 15 — **Rapid Methods and Automation in Microbiology XIV, Kansas State University, Division of Continuing Education-Registration,** KSU, 141 College Court Building, Manhattan, KS 66506-6015. Tel.: 913-532-5566, Fax: 913-535-5637.

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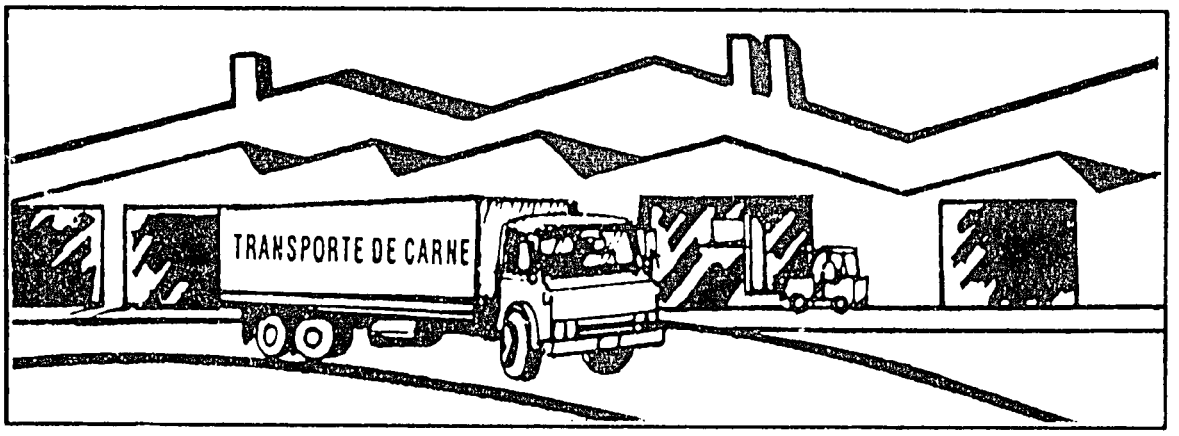

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TO: Liz Turner AT: SUSTAIN DATE: May 24, 1994

FROM: Mary Wagner AT: GORTON'S CC: S. Warhover

SUBJECT: **MISSION REPORT - USAID (GUATEMALA CITY, GUATEMALA)**

REFERENCE: **AGTA Conference**

There following is a report from my trip to Guatemala City, Guatemala on April 20th through April 23rd, 1994, in which I was a speaker at the AGTA Conference.

The purpose of my trip was to address the attendees of the conference on the subject of Total Quality Management (Attachment 1), as well as meet with individuals representing various companies on subjects ranging from Total Quality to HACCP (Attachment 2). I have attached a copy of my slides for your information and records, in case you may want to use them in the future (Attachment 3).

Site Visits/Individual Sessions

INCAP

Dr. Luiz Elias (Attachment 4) was my host during my visit to INCAP. Among our discussion points was **Dr. Elias's** view on how INCAP needed to evolve over the next few years, in order to meet international and local needs. Among the most focused needs expressed:

1. Training

   Dr. Elias suggested that 2-3 day short courses offered to participants from Central America covering such topics as QC (HACCP), sensory analysis, GMP's or baked goods, would be invaluable to the region. We discussed level of interest for those subjects and the potential attendance (he felt 25 would be possible at each). He also expressed enthusiasm for the success of such short courses, especially with the new awareness of NAFTA.

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INCAP - continued

2. Lab Services

Dr. Elias and I spent quite a while discussing the needs by industry for a good analytical laboratory. We toured the facilities so that he could show me their equipment, or lack thereof. I totally agree with **Dr. Elias** on the need for reliable services from the industrial perspective and offered to follow-up on his requests for assay information, as well as fund raising suggestions.

3. Technical Assistance

Dr. Elias believes that another valuable roll for INCAP in the future would be to assist industry in developing or improving products. Their pilot plant appeared well equipped for research (wet products), but could still use equipment for dry processing, etc. We discussed the possibility of soliciting U.S. industry used equipment, with INCAP paying for shipment to Central America.

Dr. Elias and I spent a good amount of time discussing industrial needs and potential avenues for funding INCAP projects. I agreed to follow up with examples of fundraising campaigns and suggested we coordinate at IFT in Atlanta to discuss methods of fundraising.

Dr. Jorge Zuniga (Food Analyst) and I met during my tour with **Dr. Elias** and discussed methodology for dietary fiber. I agreed to put him in touch with **Dr. John Devries** (General Mills, Inc.) to discuss proper methodology. Several questions surrounding the NLEA Regulations were discussed. I informed **Dr. Ziniga** that I would follow up with information summarizing the NLEA and methods required for compliance.

Dr. Roberto Benavides (Manager for Analytical Lab) and I discussed fast methods for Vitamin A analysis in foods. I also agreed to follow up with procedures which will assist them in their analysis.

Overall, my impression of INCAP after my brief visit was that there is a high level of enthusiasm for training, service and technical assistance programs which could benefit Central America. My recommendation for future involvement with Sustain would be to offer INCAP individuals information which would provide appropriate training opportunities. Sustain could also provide expertise in assisting in set up and management of an analytical testing facility. Finally, Sustain could very easily offer technical assistance in some of the pilot plant efforts or consultations which INCAP currently offers. All of these recommendations require funding and time from volunteers. I do not foresee any issues with getting volunteers, but funding may be more difficult.

Site Visits/Individual Sessions - continued

ALIMENTOS KERN DE GUATEMALA

Due to traffic problems, we were not able to visit Kern's on April 22, but instead met at the Conference Center to discuss various aspects to implementing a TQM program in their company. The individuals I met included **Guillermo Solorzano** (Microbiologist), **Victor Blanco** (Raw Materials) and **Maynor Ordonez** (QC Manager) (Attachment 4). The Kerns facilities process various vegetables (peas, beans, corn, etc.) year round. They were interested in implementing a TQM program which would be recognized and followed by all plant individuals, from line workers to foremen. Several of their questions and much of our discussion concerned how to implement programs, reward systems, cooperative efforts, etc. My advice for Kerns was to train as many individuals in quality, as possible, but not to try and do everything the first year.

FOREMOST DAIRIES

I met with **Martha Leticia Almengor** (Attachment 4) concerning labor issues involving quality in there ice-cream plant. Apparently they are having problems with contamination in pop cycle production. I suggested that she complete job descriptions for key positions and fill those positions with individuals fitting those requirements. I informed her that I would follow up with examples of job descriptions which she might find useful.

GEXPRONT

Emilio Bauer (Attachment 4) works for a seafood company which currently is investigating getting into the shrimp business. Though the competition in Guatemala consists of 2 other shrimp companies who hold the licenses to process shrimp, **Emilio's** company is trying to acquire some share in the business. His biggest interest in talking with me was to find out about his companies potential to co-pack for companies in the U.S., such as Gorton's or Red Lobster. I informed him that I would pass his name onto other General Mills buyers.

McDONALD'S

Jorge Menendez (Attachment 4) from McDonald's and I met to discuss ideas for implementation of a frozen food processing line within an already existing plant. Basically, we discussed the "how to" of getting a good idea bought by big business. **Jorge** is currently trying to produce frozen McDonald's pies for resale in other outlets, such as Club stores. My suggestion to Jorge was to try and find a solution to the frozen distribution drawback in Guatemala and to consider Mexico or the U.S. as potential sales points for his product.

SUMMARY

My overall impression of my visit and presentation at the AGTA Conference was that the individuals of Guatemala are extremely enthusiastic and interested in obtaining information and guidance in their efforts to break into new and existing markets. My time was well spent and I would be very willing to help out in any way possible in the future.

Thank you!

PROGRAMA DE CONFERENCIAS
II CONGRESO NACIONAL DE LA INDUSTRIA ALIMENTARIA Y EXPOSICION INDUSTRIAL - AGTA'94-
¿ESTAMOS PREPARADOS PARA COMPETIR?
Hotel El Dorado, Guatemala 20 - 23 Abril de 1994.

Miércoles 20 de abril - 19:00 Hrs.

CEREMONIA INAUGURAL Y CONFERENCIA INAUGURAL

del Sr. Anthony Adams, Director de Global Marketing Information para The Coca Cola Company.
Tema: Mercadeo Global; un reto para la Industria de Alimentos.

INAUGURACIÓN DE LA EXPOSICIÓN INDUSTRIAL Y COCKTAIL INAUGURAL

Cortesía de Alimentos Kern de Guatemala.
Bebidas cortesía de Importadora y Distribuidora Izabelle.

Jueves 21 de abril - 8:00 a 12:30 Hrs.

SIMPOSIUM: LOS RETOS DE LA GLOBALIZACIÓN Y LA APERTURA DE MERCADOS.

8:00 a 8:35 La industria guatemalteca ante la globalización y apertura de mercados; invasión de productos Vrs. oportunidades para nuestros productos. Lic. José Orive, representante permanente de Guatemala para la incorporación de Centro América al TLC Norteamericano, Guatemala.

8:40 a 9:25 Efectos de la globalización y Tratados de Libre Comercio en la Industria Nacional de Alimentos. Ing. Eduardo Sperisen, Director Ejecutivo, Cámara de Industria de Guatemala, Guatemala.

9:30 a 10:10 Estudio de un caso: Competitividad de las empresas centroamericanas fabricantes de jugos y néctares. Estudio patrocinado por BID, FEDEPRICAP Y GEXPRONT. Ing. Luis E. Reyes, Guatemala.

10:15 a 10:35 Coffee Break cortesía de THE QUAKER OATS, Co., en el área de Exposición.

10:35 a 11:05 Respuesta de la Industria Nacional de Alimentos ante la apertura de mercados. Sr. Jorge Luis Cabrera, Gerente de Mercadeo, Fábrica de Productos PETER PAN, Guatemala.

11:10 a 12:00 Mesa Redonda: ¿Estamos preparados para competir?. Participantes: Lic. José Orive, Ing. Eduardo Sperisen, Ing. Luis Reyes, Sr. Jorge Luis Cabrera y Anthony Adams. Moderador: Lic. Clark MacDonald, AGTA.

12:00 a 13:00 Período especial para visitar la Exposición Industrial.

Jueves 21 de abril - 14:00 a 17:45 Hrs.

SIMPOSIUM: CALIDAD TOTAL EN LA INDUSTRIA DE ALIMENTOS.

14:00 a 14:45 ¿Qué es Calidad Total?; su filosofía, sus métodos. Dr. Jorge Arturo Pérez Monge. Entrenamiento para la Calidad /E.P.C./ Pérez Monge y Asociados, Puebla, México.

14:45 a 15:25 Sistema de control de puntos críticos (HACCP) en la Industria de Alimentos. Damian Gabis, Director Ejecutivo de Silliker Laboratories Group, Inc., Estados Unidos.

15:25 a 16:10 ¿Cómo implementar un Programa de Calidad Total en una Industria de Alimentos?. Dra. Mary Wagner, Directora de Investigación y Desarrollo, Calidad y Operaciones Regulatorias de Gorton's División de General Mills, Inc., Estados Unidos.

16:10 a 16:30 Coffee Break en el área de Exposición.

16:30 a 17:05 Experiencias en la Industria Nacional de Alimentos, en la implementación de Programas de Calidad Total. Ing. Sergio Morales, Gerente de Programa de Calidad Total de Licorera La Nacional, Guatemala.

17:05 A 17:45 Foro de discusión: ¿Estamos preparados para la Calidad Total en la Industria Nacional de Alimentos?. Participantes: Dr. Jorge Pérez Monge, Ing. Sergio Morales, Dra. Mary Wagner, y Dr. Damien Gabis . Moderador: Ing. Rolando Gálvez, AGTA.

17:45 a 19:00 Período especial para visitar la Exposición Industrial en el Salón Los Reyes.

Viernes 22 de abril - 8:00 a 12:30 Hrs.

TEMAS DE ESPECIAL INTERES PARA LA INDUSTRIA ALIMENTARIA

8:00 a 8:40 Normas ambientales y conciencia ambientalista: ¿Cómo afectarán a la Industria de Alimentos?. Lic. Jorge Cabrera, Director Ejecutivo, Comisión Centroamericana de Ambiente y Desarrollo, Guatemala.

(Continúa en página 12)

8:45 a 9:25 Residuos de pesticidas en alimentos procesados: Una barrera para la exportación de productos a Estados Unidos. Christine Chaisson, Directora, Technical Assesment Systems Inc., Estados Unidos.

9:30 a 10:10 Aplicaciones de la biotecnología en la Industria de Alimentos Ing. Francisco Calzada, ICAITI, Guatemala.

10:15 a 10:35 Coffee Break en el área de Exposición.

10:35 a 11:10 Nuevos productos alimenticios fabricados en Guatemala. Ing. Rodolfo Bressani, AGTA, Guatemala.

11:15 a 11:55 Tendencias del mercado mundial de productos alimenticios. Douglas Guimaraes Universal Flavors, Guatemala.

12:00 a 13:00 Período especial para visitar la Exposición Industrial.

Viernes 22 de abril - 14:00 a 17:30 Hrs.

SIMPOSIUM: SOYA PARA LA INDUSTRIA DE ALIMENTOS

14:00 a 14:10 Inauguración. Sr. Grant Pettrie, Agregado Agrícola, Embajada de Estados Unidos en Guatemala.

14:10 a 14:15 Introducción. Ing. Carlos Rafael Anzueto, Asociación Americana de Soya, Guatemala.

14:15 a 15:05 Alimentos innovadores a base de soya, en el mercado internacional. Peter Golbitz, Soyatech / Asociación Americana de Soya, Estados Unidos.

15:15 a 15:50 Desarrollo y evaluación de mezclas de maíz tierno (elote) y leche de soya en bebidas tipo atol. Dr. Ricardo Bressani, Centro de Investigación de la Universidad del Valle de Guatemala, Guatemala.

16:00 a 16:15 Coffee Break en el área de Exposición, cortesía de La Asociación Americana de la Soya.

16:15 a 17:05 Uso de la proteína de soya en sistemas de carnes procesadas. Dr. Russ Egbert, Archer Daniels Midland (ADM), Estados Unidos.

17:15 a 17:50 Proteínas de soya en bebidas, leches y lácteos procesados. Ing. Patricia Ayala, Productos Alimenticios Delicias / Asociación Americana de Soya, México.

18:00 a 19:00 Período especial para visitar la Exposición Industrial. 19:00 Hrs. Clausura oficial de la Exposición.

Sábado 23 de abril - 8:00 a 10:20 Hrs.

SESIONES SIMULTANEAS

SESION No. 1 - Salón María del Rosario:

8:00 a 8:20 Desarrollo de una agroindustria rural femenina en la región de Totonicapán, Guatemala. Ing. Florence Tartanac, INCAP.

8:20 a 8:40 Deshidratación de la pulpa de zapote por procesos combinados. Carlos Pinto, Universidad del valle de Guatemala.

8:40 a 9:00 Desarrollo de un alimento para niños, a base de amaranto (A. Cruentos). Alma Ortíz, Universidad del Valle de Guatemala.

9:00 a 9:20 Extracción y cuantificación de las proteínas del grano de amaranto y fracciones físicas obtenidas por molienda abrasiva y tamizado. María Ester Búcaro, Universidad del Valle de Guatemala.

9:20 a 9:40 Preparación de un concentrado proteínico y de aceite del gérmen del grano de amaranto. Karen Wirst, Universidad del Valle de Guatemala.

9:40 a 10:00 Avances y aplicaciones de la Ingeniería Genética de Plantas en la producción y procesamiento de Alimentos. Dr. Luis Mejía, Universidad de San Carlos de Guatemala.

10:00 a 10:20 Coffee Break.

SESION No. 2 - Salón Emperador:

8:00 a 8:20 Films comestibles. Luz Marie Ortega, Universidad del Valle de Guatemala.

8:20 a 9:00 Normas de identidad y calidad para leche de soya y productos derivados. Peter Golbitz, Soyatech / Asociación Americana de Soya, Estados Unidos.

9:00 a 9:40 La soya en la industria mexicana de alimentos. Ing. Antonio Mouret, Nutrimex, S.A., México.

9:40 a 10:00 La soya en panificación. Lic. Adela Pérez Delgado, Asociación Americana de Soya, México.

10:00 a 10:20 Coffee Break

SESION No. 3 - Salón María del Cármen

8:00 a 8:40 Programa de capacitación continua para el personal de la industria de alimentos INCAP / AGTA / SUSTAIN. Dr. Luis Elías, INCAP.

8:40 a 9:20 Tratamiento de aguas residuales en una destilería. Ing. Jaime Pinzón, Gerente General de Destilería de Alcoholes y Rones y Gerente General de Central de Bebidas Finas, Guatemala.

9:20 a 10:00 Publicidad de productos alimenticios. Walter Brolo, FCB Publicidad, Guatemala.

10:00 a 10:20 Coffee Break.

Sábado 23 de abril - 10:20 a 13:00 Hrs.

SESION UNICA, SALON EMPERADOR

MESA REDONDA: EL PAPEL DE LA UNIVERSIDAD Y LA INDUSTRIA EN LA FORMACION DE PROFESIONALES DE LA TECNOLOGIA DE ALIMENTOS

PONENCIAS:

10:20 a 10:40 Situación de la carrera de Ingeniería y Ciencia de Alimentos en Guatemala. Dr. Ricardo Bressani, Investigador Asociado, Universidad del Valle de Guatemala.

10:40 a 11:00 La Universidad como formadora de Recursos Humanos. Ing. Héctor Centeno, Rector, Universidad del Valle de Guatemala.

11:00 a 11:20 El rol de la industria en la formación de Recursos Humanos. Representante de la Industria de Alimentos (por confirmar).

11:20 a 11:40 Opciones académicas para preparar el profesional de la Tecnología de Alimentos. Dr. Raúl González, Decano Facultad de CC y HH., Universidad del Valle de Guatemala.

11:40-13:00 Discusión y Conclusiones

PANELISTAS INVITADOS

13:00 Cocktail de Clausura, Cortesía de Asoc. Americana de Soya e Importadora y Distribuidora Izabelle.

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SCHEDULE

DAY	TIME	ACTIVITY
20		ARRIVAL
21	09:00 - 12:00	INCAP. Dr. Luiz Elías
21	Afternoon	Conference at Congress
22	Morning	Open Sessions with Participants at Congress
22	14:00 - 17:00	ALIMENTOS KERN DE GUATEMALA. Maynor Ordóñez
23	07:15	DEPARTURE

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ATTACHMENT 3

TOTAL QUALITY AWARENESS

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WHY TOTAL QUALITY MANAGEMENT

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- "IT'S A GOOD BUSINESS DECISION - IT MAKES MONEY." — P. TOWNSEND
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TIME

"The most expensive thing about quality is the price you pay for ignoring it. Today, that price is lower market shares, decreased profit margins, higher manufacturing costs, increased warranty expenses. And worst of all, unhappy customers."

Don Davis

PRESIDENT — ALLEN-BRADLEY COMPANY

THE UNDERSTANDING

- Quality Is Free.
- What Costs Money Are The "Unquality" Things—Things Not Done Right The First Time.
- Cost For "Unquality Things" Approximately 20% Of Sales Dollars.

Phil Crosby

EXAMPLES OF "UNQUALITY" PERFORMANCE

- Miswiring Of Boeing Airliners.
- Automobile Recalls To Repair Defects.
- Kodak 10 Year Battery That Won't Last 10 Years.
- Pratt & Whitney's Failure To Provide Spare Parts For Jet Engines In A Timely Fashion.
- Poorly Manufactured Seafood Blocks?...

The Profile of A Quality Troubled Company

Characteristic	That's Us All The Way	Some Is True	We're Not Like That
1. Our services and/or products normally contain waivers, deviations and other ways of not conforming to requirements.			
2. We have a "fix it" oriented field and/or dealer organization.			
3. Our employees do not know what management wants from them concerning quality.			
4. Management does not know what the price of nonconformance really is.			
5. Management feels quality is a problem that is caused by something other than management action.			
	5 POINTS	3 POINTS	1 POINT

Point count conditions:

21-25	Critical.	Needs intensive care immediately.
16-20	Guarded.	Needs life support system hookup.
11-15	Resting.	Needs medication and attention.
6-10	Healing.	Needs regular chek-up.
5	Whole.	Needs counseling.

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ERRONEOUS ASSUMPTIONS ABOUT QUALITY

1. Quality means goodness.
2. Quality is intangible and therefore not measurable.
3. The third erroneous assumption is that there is an "economics" of quality.
4. Problems of quality are originated by the workers.

MANAGEMENT'S TRADITIONAL VIEW OF QUALITY

Goodness	Excellence
Elegance	Optimum
Beauty	Brightness
Luxury	Dignity
Size	Customer Satisfaction

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TOTAL QUALITY AWARENESS EDUCATION

PURPOSE

"To provide Gorton's employees with a common understanding of the Total Quality improvement process and their roles in making Total Quality happen throughout the company."

THE GORTON'S WAY

- The Gorton's Way is to provide our consumers and customers with products and services that surpass their expectations.
- The Gorton's Way Includes:
  - An intense focus on satisfying the consumer first, last, and always
  - A commitment to providing competitively superior products and matchless customer service
  - An organization and individual dedication to always doing things right and to doing the right things
  - A strong belief in the importance of all our people, their ideas, and their ability to take ownership and make a difference
  - A partnership with all our business associates that is based on clear requirements and superior execution
  - A restless dissatisfaction that causes continuous learning, changing, and improving
  - An extraordinary responsiveness to what needs to be done, made possible by effective focus, teamwork and communication

TOTAL QUALITY = CONFORMANCE TO THE RIGHT REQUIREMENTS

DEFINITION

- Requirement:
  1. That Which is Required
  2. Something Needed
  3. Something Obligatory
  4. A Prerequisite
- Requirements are Answers to Questions – What, When, Where, How Much, Etc.
- Requirements, Like Measurements, are Communications

"REQUIREMENTS" INCLUDE

A. Consumer Requirements

B. Customer Requirements

C. Manufacturing Requirements

D. Distribution Requirements

E. Sales Requirements

F. Supplier Requirements

CONSUMER REQUIREMENTS

All Successful Business Strategy Should Start with the Consumer

CONSUMER REQUIREMENTS INCLUDE:

- Needs Relating to Intended Use
- The Price They are Willing to Pay
- The Desired Product Attributes
- Etc.

CUSTOMER REQUIREMENTS

What Types of Changes Impact Requirements?

A. Technology Changes

B. Store Changes

C. Inventory Changes

MANUFACTURING AND ENGINEERING REQUIREMENTS

- Defect Free Raw Materials.
- Reliable Manufacturing Systems.
- Clear Product Specifications.
- Controllable Processes.

DISTRIBUTION REQUIREMENTS

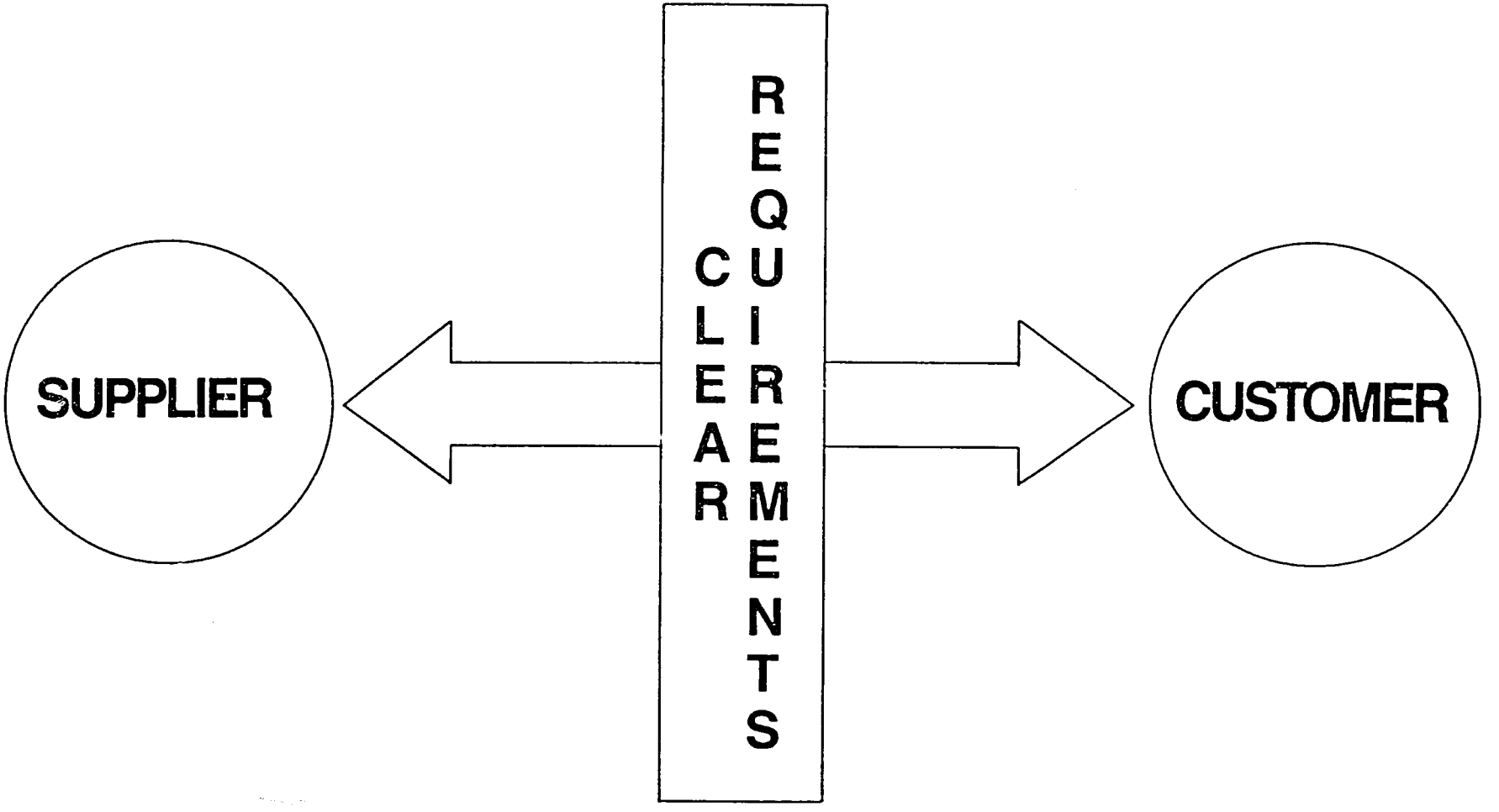
Do Distribution Requirements Too Frequently Deal with Capability of Existing System and Practices?

SALES REQUIREMENTS

1. Are Training Needs Changing?
2. Is Product Knowledge More Necessary?
3. Is Knowledge of Customer Requirements Changing?

SUPPLIER REQUIREMENTS

- Known Material Requirements of Customer.
- Defect Free Raw Materials.
- Knowledge of Material Use.
- Common Measurement Techniques.


SUPPLIER
CLEAR REQUIREMENTS
CUSTOMER

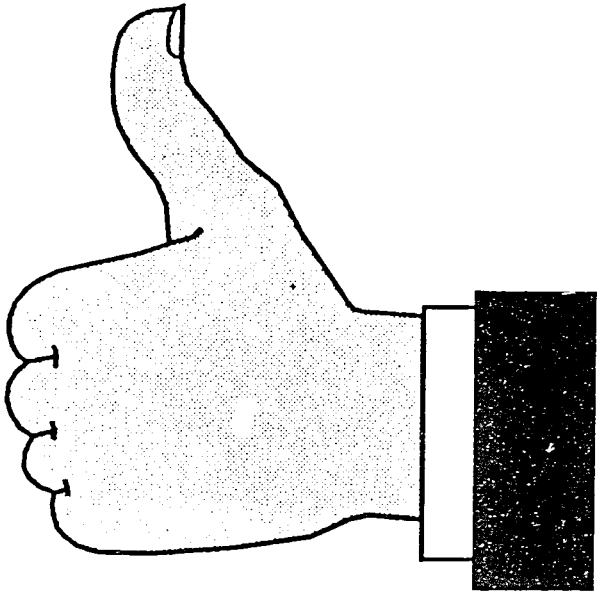
"SUPPLIER" "CUSTOMER" RELATIONSHIPS

1. Marketing - R & D
2. R & D - Q.C.
3. Purchasing - Q.C.
4. Purchasing - Manufacturing
5. Distribution - Sales
6. R & D - Manufacturing
7. Etc...

CONFORMANCE
100% OF THE TIME

1. Product
2. Maintenance Schedules
3. Process Control
4. Delivery Time
5. Raw Materials
6. R & D Research Data
7. Other?

"DO IT RIGHT THE FIRST TIME"



"IT" ARE THE REQUIREMENTS

ZERO DEFECTS

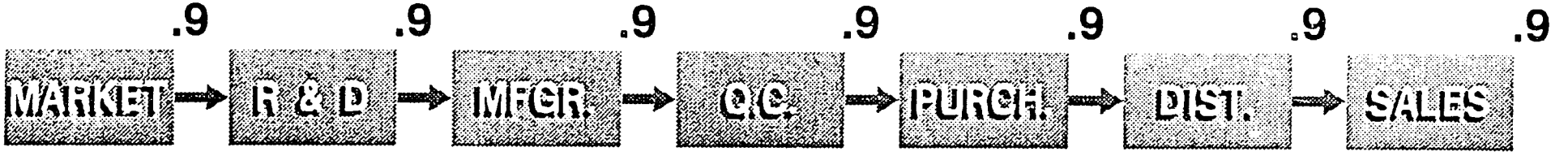
WE ALREADY EXPECT ZERO DEFECTS IN SOME THINGS

- AIRPLANE LANDINGS
- PRESCRIPTIONS
- TV TRANSMISSION
- PARACHUTE JUMPS
- SURGERY
- YOUR PAYCHECK

EXCEPTION DECISIONS MEAN ONE OF TWO THINGS:

- The Requirements are Wrong
- Non-Conformance is The Problem and It Must Be Solved

THE "THATS CLOSE ENOUGH" SYNDROME



FOR 90% CONFORMANCE

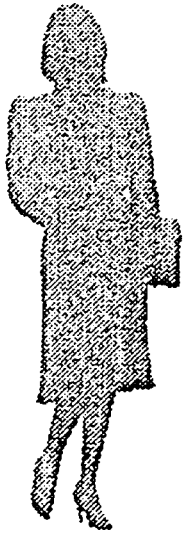
$$.9 \times .9 \times .9 \times .9 \times .9 \times .9 \times .9 = 0.48$$

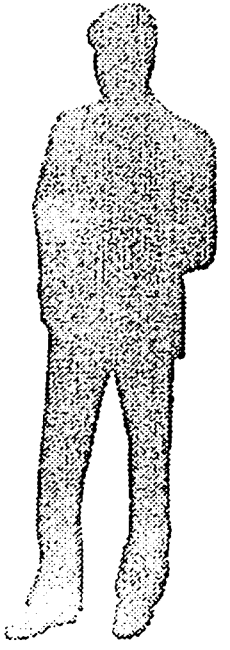
FOR 95% CONFORMANCE

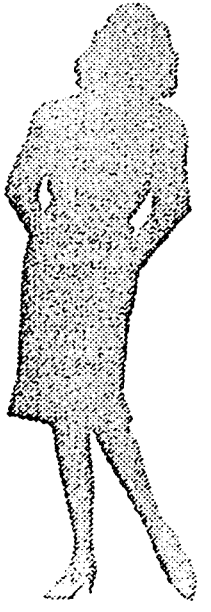
$$.95 \times .95 \times .95 \times .95 \times .95 \times .95 \times .95 = 0.70$$

LAST YEAR, 71% OF U.S. CONSUMERS WERE DISAPPOINTED AT LEAST ONCE.

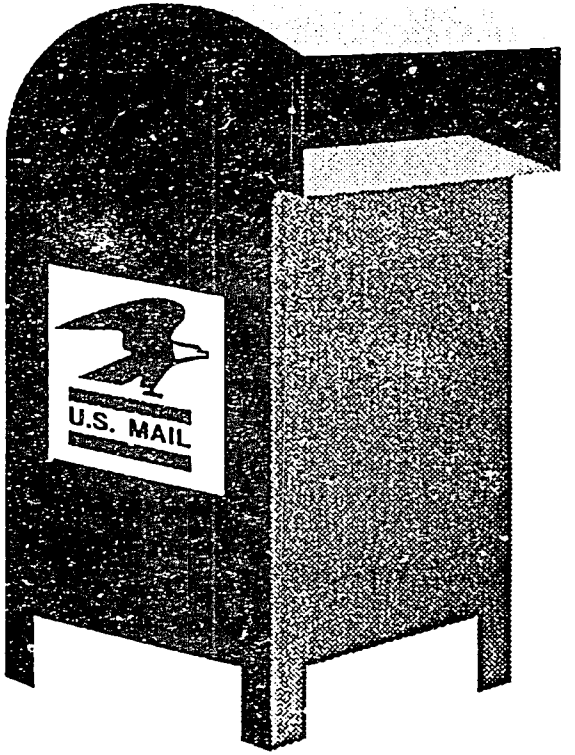
What Did They Do?







U.S. CONSUMER RESPONSE TO DISAPPOINTMENT

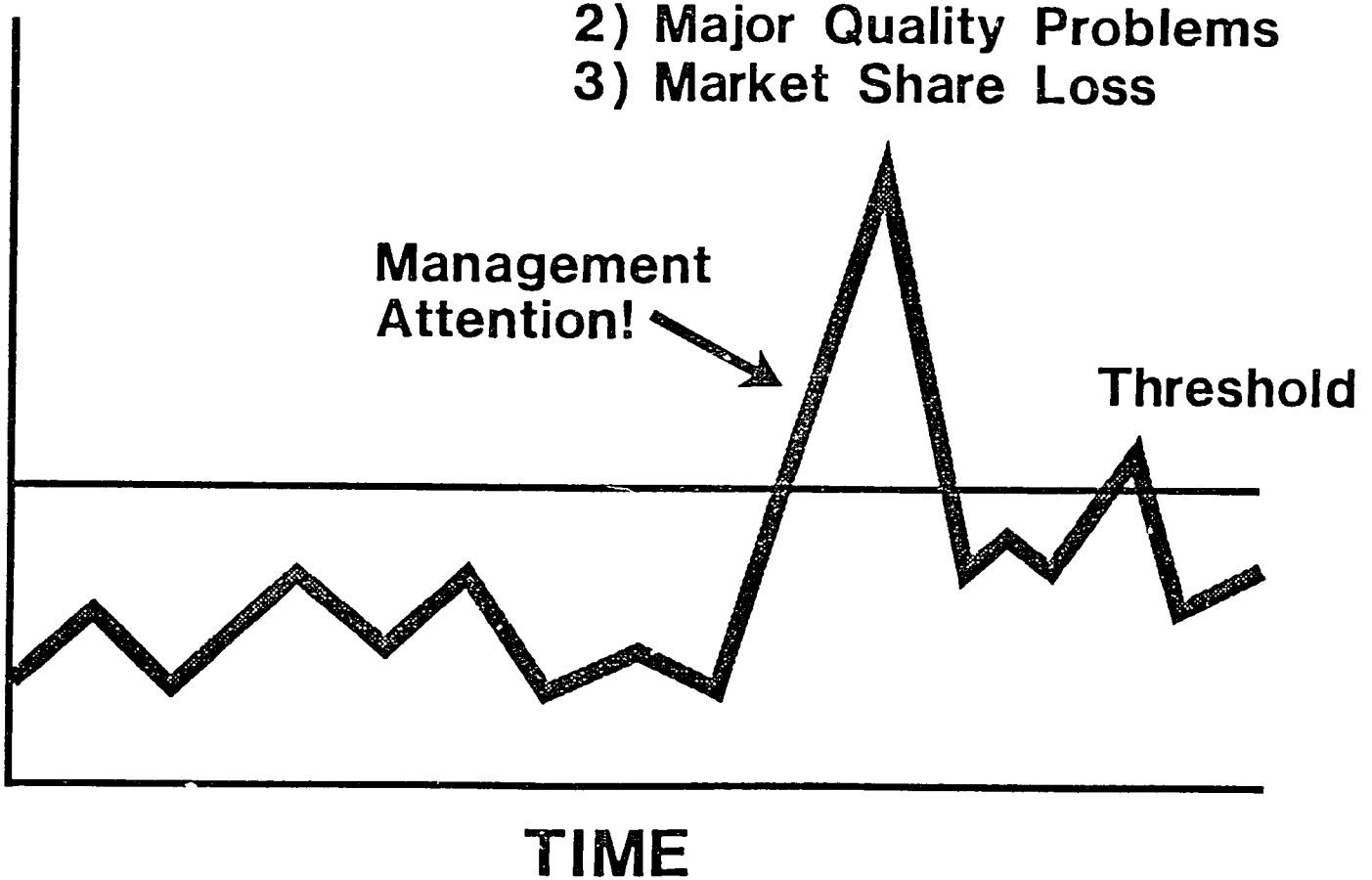


Only 2% Wrote to Supplier

32% TO 45% SWITCHED BRANDS OR REFUSED TO BUY AGAIN

THRESHOLD OF PAIN

MONEY
HASSLES
PROBLEMS



Gorton's

The Cost of Quality Iceberg

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COST OF TOTAL QUALITY =

1. <u>Price of Conformance (POC):</u>
   What it Costs to Get Things Done Right the First Time
   - Prevention Costs
   - Appraisal Costs

PLUS

2. <u>Price of Non-Conformance (PONC):</u>
   What it Costs to Do Things Wrong
   - Internal Failure Costs
   - External Failure Costs

PRICE OF NON-CONFORMANCE

- Rework Cost
- Return Cost
- Additional Storage
- Lower Price for Product
- Lost Customers

MANUFACTURING
COQ CATEGORIES/ELEMENTS
Price of Conformance

1. Plant Tests
2. Start-Up
3. Training
4. Preventative Maintenance
5. Product Protection
6. Quality Control
7. Instrumentation & Process Control Maintenance
8. Production Labor Inspection and Test
9. Other?

MANUFACTURING
COQ CATEGORIES/ELEMENTS
Price of Non-Conformance

1. Ingredient & Packing Material Loss
2. Rework
3. Downtime
4. Workers Compensation Sickness & Accident
5. Case Fill Rate
6. Quality Control
7. Complaints
8. Product Recall
9. Sanitation
10. Other?

DISTRIBUTION
COQ CATEGORIES/ELEMENTS
Price of Conformance

1. Premium for Using Quality Transportation
2. Sanitation at Plants (Wages and Benefits)
3. Premium for Using Quality Warehousing
4. Load Protection
5. D.C. Sanitation Costs
6. Fumigation - D.C.'s
7. Product Recall
8. Product/Ingredient Counts at Plant
9. Shipment Tracing
10. Customer Visits in Regard to Customer Service
11. Other?

DISTRIBUTION
COQ CATEGORIES/ELEMENTS

Price of Non-Conformance

1. Vehicle Space Utilization
2. Lost Sales Due to Product Cuts
3. Non-Optimal Sourcing
4. Inventory Carrying Costs
5. Detention/Demurrage
6. Preload Damage
7. Claims Admin.
8. Recoop/Handling Damage
9. Invoice Correction - Due to Shipping Problems
10. Sales Admin. to Handle Shipping Problems/Product
11. Customer Returns
12. Other?

HUMAN RESOURCES
COQ CATEGORIES/ELEMENTS
Price of Conformance

1. Pre-Screen Applications
2. Interviewing
3. Personnel Testing (Physical)
4. Reference Checking
5. Attitude Surveys
6. Orientation
7. Training
8. Safety Program
9. Exit Interviews
10. Performance Appraisal
11. Attendance Tracking
12. Other

HUMAN RESOURCES
COQ CATEGORIES/ELEMENTS

Price of Non-Conformance

1. Turnover Rates
2. Grievance Tracking
3. Untimely Filling of Position
4. Cost of Injuries
5. Grievance Meetings/Arbitrations
6. Workers Compensation
7. Other?

CONTROLLER
COQ CATEGORIES/ELEMENTS

Price of Conformance

1. Training and Procedures
2. Inventory Reconciliation
3. Budget Preparation
4. Long Range System Planning
5. Time Card Review
6. Capital Expenditure Reviews
7. Product Cost Standards
8. Financial Tracking
9. Other?

CONTROLLER
COQ CATEGORIES/ELEMENTS

Price of Non-Conformance

1. Stock Adjustments
2. Improper A/P Vendor Payments
3. Incorrect Accounting Entries
4. Payroll Errors
5. Improper Freight Payments
6. Expense Report Errors
7. Product Costing Errors
8. Variance Analysis
9. Other?

ENGINEERING
COQ CATEGORIES/ELEMENTS

Price of Conformance

1. Design Specification Reviews
2. Equipment Evaluation
3. Planned Preventative Maintenance
4. Process Capability Studies
5. Obtain and Deliver Technical Manuals
6. Production of Accurate and Complete Drawings
7. Vendor Qualification
8. Engineering Audits
9. Engineering Start-Up
10. Other?

ENGINEERING
COQ CATEGORIES/ELEMENTS

PRICE OF NON-CONFORMANCE

1. ENGINEERING TRAVEL AND TIME ON PROBLEMS
2. E.C.N'S - ENGINEERING CHANGE ORDERS (REWORK, RELOCATE)
3. REDESIGN - ENGINEERING AND DRAWING COSTS
4. PREMIUM FREIGHT COSTS
5. EXTRA VENDOR COSTS
6. LOST PRODUCT AND LABOR ON PRODUCTION START-UP
7. LOST SALE DUE TO PRODUCTION SHORTFALL
8. LOST EQUIPMENT DUE TO EQUIPMENT BREAKDOWN
9. OTHER?

QUALITY CONTROL
COQ CATEGORIES/ELEMENTS

Price of Conformance

1. Quality Training
2. Test Planning
3. Inspection Planning All Tests, Analyses, Inspections Done
4. Audit Planning
5. Vendor Approval
6. Calibration of Quality Equipment - Laboratory and Processing Equipment
7. Product Reviews
8. Review of the Systems/ Procedures that Impact on Quality
9. Consumer Complaint Studies/Contacts with Retailers
10. Other?

QUALITY CONTROL
COQ CATEGORIES/ELEMENTS

Price of Non-Conformance

1. Hold Orders - Scrap Analysis
2. Rework Analysis
3. Product Guarantee Costs
4. Factory Returns Analysis - Consumer/Customer Complaints Analysis
5. Raw Materials - Complaints, Returns, Etc.
6. Others?

The Key To Understanding The Price Of Non-Conformance Is:

MEASUREMENT

How Are We Doing In All Areas Relative To The Customers Requirements?

THE CROSBY FOUR ABSOLUTES OF QUALITY MANAGEMENT

1. Total Quality is Conformance to Requirements
2. We Must Conform 100% of the Time
3. Our Strategy must be Prevention
4. We Must Measure by P O N C

PREVENTION

Policy

- What is to be Done

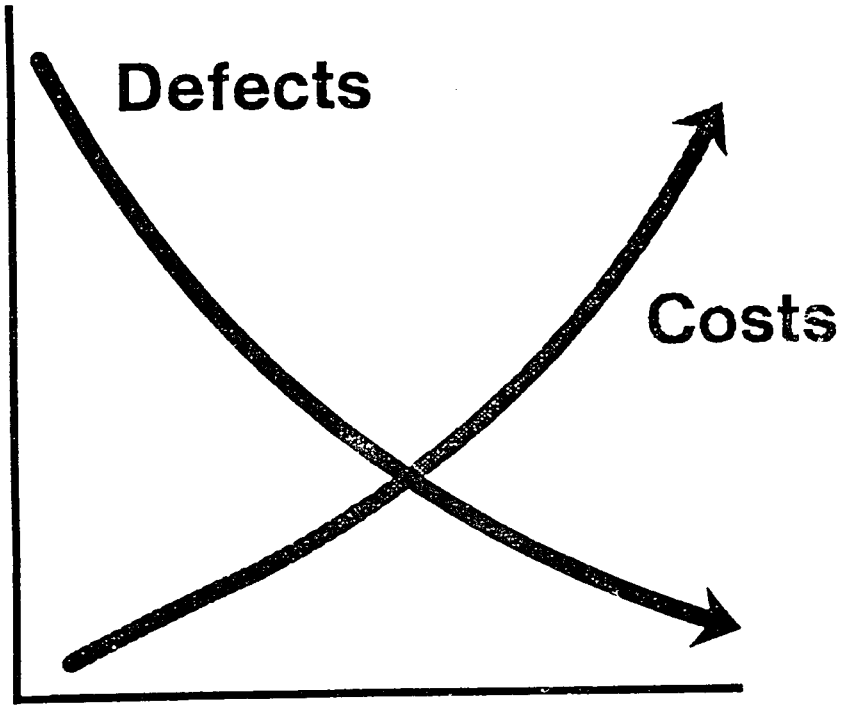
System(s)

- How a Policy is Implemented

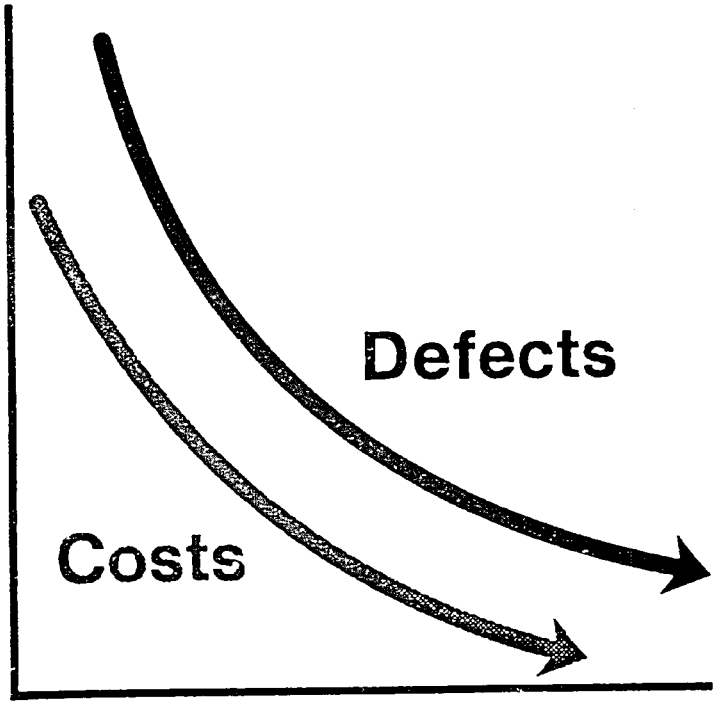
DEFINITION

Prevention is Causing Something Not to Happen

APPRAISAL



PREVENTION



PREVENTION

- Clear Requirements
- Well-Defined Process
- Capable Process
- Controllable Process

KEY ELEMENTS TO DEVELOP A TOTAL QUALITY ACTION AND AWARENESS PLAN

1. Management Commitment
2. Find Out Where We Are (Measurement)
3. Management Participation
4. Involvement of All Departments
5. Communication
6. Training

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MANAGEMENT COMMITMENT

A. Establish Total Quality Policy and Strategies

B. Require Appropriate Systems, Tools, and Resources are Present

C. Walk The Talk

FIND OUT WHERE WE ARE
(Measurement)

A. Identify Quality Costs through PONC

B. Establish Quality Goals and Measures at Each Operational Level

MANAGEMENT PARTICIPATION

A. Assist Groups in Identification of Key Quality Issues and Development of Strategic Quality Improvement Plan

B. Require the Establishment of Quality Objectives and Monitor Progress(Action Plan)

INVOLVEMENT

Division/Functions/Plants Prepare Plans for Achieving Overall Division Goals:

- Each Plan is Prevention Oriented and Backed by Functional Operational Procedures
- Each Plan Identifies Quality Performance Indicators(Measurement)
- Each Plan is Programmed to Capture Total Quality Costs

COMMUNICATION

A. Communicate the Meaning, Importance, and Successes of Total Quality Through Periodic Publications and Group Meetings

B. Communicate with Internal/ External Customers to Uncover Quality Problems and to Establish Clear Requirements

TRAINING

A. Educate All Employees on the Meaning and Application of Total Quality

B. Train Employees on How to Make Total Quality "A Part of the Job"

C. Train Employees to Provide Them with the Knowledge and Skills Needed to Help Meet Requirements

WHAT IS THE RESPONSIBILITY OF THE QUALITY CONTROL DEPARTMENT?

1. Assure Systems of Control are Developed and Implemented

2. Assure Corrective Actions are Taken on Non-Conformance

3. Identify Opportunities for Improvement

TOTAL QUALITY
LESSONS LEARNED

1. QUALITY IS AN ONGOING PROCESS, NOT A QUICK FIX PROGRAM.

2. QUALITY COMES DOWN TO PEOPLE.

3. QUALITY CZARS AREN'T THE ANSWER.

4. QUALITY NEEDS TO BE INTEGRATED AT EVERY LEVEL

DR. THOMAS L. BROWN

Managing the quality dimension of an organization is not generically different from any other aspect of managment. It involves the formulation of strategies, setting goals and objectives, developing action plans, implementing plans, and using control systems for monitoring feedback and taking corrective action. If quality is viewed only as a control system, it will never be substantially improved. Quality is not just a control system; Quality is a management function.

White House Conference On Productivity

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The Coca-Cola Company
COCA-COLA PLAZA
ATLANTA, GEORGIA

APR 29 1994

ANTHONY ADAMS
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April 25, 1994

Ms. Liz Turner, Director
SUSTAIN
1401 New York Avenue, NW.
Suite 1100
Washington, D.C. 20005-2160

Re: SUSTAIN Assignment - Guatemala, August 20-23

1. With four other members of a SUSTAIN team (Liz Turner, General Mill's Mary Wagner, Silliker Laboratory's CEO, Damian Gabis and Technical Assessment Systems Director, Christine Chaisson) I visited Guatemala with the objectives to:

   - Provide the keynote presentation to AGTA Second Congress and Industrial Exposition.

   - Provide marketing consultancy to participants and conferees of the AGTA Congress.

   - Identify opportunities to provide future marketing consultancy and training to AGTA, INCAP.

2. Trip report Itinerary

   - April 20 - Keynote presentation - The Global Consumer: Today and Tomorrow. I made a presentation at the initial inaugural meeting on Wednesday evening. My presentation to the roughly 200 attendees was built on the importance of understanding today and tomorrow's global consumer with the objective of being competitive in tomorrow's world market. A copy of this presentation and a hard copy of the slides is enclosed. I received an enthusiastic feedback from many of the attendees with numerous questions regarding the information presented and inquiries about specific points that were made.

- April 21 - Participated in a Round Table discussion with other presenters including MC Clark McDonald (AGTA), Sr. Jorge Luis Cabrera, CEO of Peter Pan Gums, Eduardo Sperisen, Director of Camara de Industra and José Orive -- As I commented in my Round Table remarks, I found this discussion extremely productive. The speakers were extremely "honest" in laying out the challenges of Guatemala competing in tomorrow's world economy -- especially with the lowering of many trade barriers. While honest and realistic, I still picked up a strong of constructive optimism. Sr. Cabrera was especially effective in pointing out how a Guatemalan enterprise can be competitive. He emphasized the importance of world food "fairs" such as ANUGA in Germany.

  My message was to take the "mystery" out of marketing and point out that to compete in tomorrow's world marketplace will require one, but hopefully two of the following product characteristics:

  - A meaningful point of difference (this could come from the product itself, packaging, or positioning)

  - Be better than competition (a more difficult objective)

  - Be cheaper (again an economic challenge)

  The audience seemed to especially like to discuss a point I made that in the future, countries will compete on the basis of their core competencies -- areas where an economic advantage or a point of difference is available. Other speakers pointed out the importance of consistent quality, which I pointed out was not just a technical goal, but almost a marketing assumption in terms of consumer expectations. Several of the speakers admonished the Guatemala food industry for not responding quickly enough in areas such as sanitation. I pointed out the importance of competitive intelligence -- understanding the source and cost structure of competing food entities -- not only in Central America but in Latin America and North America as well.

  - In the afternoon I consulted with several participants. One that produced a wide ranging discussion was the marketing director of DACSA a provider of hardware and software for scanner installations in supermarkets. Along with yourself (Liz Turner), we also visited Hugo Zacarias, Special Secretary of the Banko Interamericano of Desarrollo. Sr. Zacarias and the bank are looking into setting up programs with a number of cooperatives

where SUSTAIN could also provide project support in both technical and marketing areas.

- April 22 - I spent Thursday morning with the key management at INCAP, including Dr. Hernan Delgado, its director, Dr. Luis Elias and Arturo Palmieri, its director of marketing. INCAP's dependency on government grants, primarily from USAID, is under strain and it is looking for new and independent sources of income and revenue. Based on an industry survey that they did in 1992, they have identified three areas of industry need which INCAP could serve:

  - Training
  - Lab Services
  - Technical Assistance/Consulting

  They are also looking to form a new endowment with participation from major private businesses from all over the world. My contribution to these interviews focused on:

  - The need to communicate to all levels of management and employees the importance of change and the need to break away from "business as usual".

  Process Discipline - In addition to communicating change and a new vision/mission, I strongly recommend to Dr. Elias that the three INCAP projects be put into a strategy charter process, with a champion for each of the three programs. I offered to send a template of a strategy charter process.

  - The importance of prioritizing and economically "sizing" the three opportunity areas they have identified (their survey, while useful, does not provide a useful basis to "size" the opportunities it identifies.)

  - The importance of "focus, focus, focus". Sr. Palmieri seemed to want to spread INCAP among a number of areas while Dr. Elias seemed to appreciate what I was pointing out in terms of the absolute necessity of focus and prioritizing.

  INCAP has identified a program with great promise in my opinion -- a so called "seal of quality". This seal would be offered to both produce and processing entities following inspection of quality control by INCAP personnel (a copy of the seal is attached). This really does

have great potential in my opinion -- sort of a Good Housekeeping seal of approval. In fact I promised to obtain copies of the Good Housekeeping "seal guidelines" from a key Good Housekeeping executive, George Corrigan. I pointed out the importance of understanding how consumers and industry understand this seal. Two of the key words used need further evaluation; i.e., "nutricion" and "certifica la composicion". I promised to stay in touch with INCAP through yourself as well as Dr. Elias with the follow-ups above.

- April 22 - Afternoon Visit USAID - You and I visited the USAID Trade Development Officer, Kimberly Delaney as well as its Chief, Program Director, Elizabeth Warfield. Your objective was to see if they might provide funding for SUSTAIN's participation in the coop programs being organized by IDB. Ms. Warfield was very positive about the program and asked for more details and a required budget (I believe you gave her a figure of $1 million). If IDB can get this program off the ground, there looked to be a pretty good possibility for AID support for SUSTAIN.

3. A key follow-up will be to offer AGTA's new leadership team (including Clark McDonald's successor) with a marketing training program. As I pointed out in our discussions, this cannot be just simply an off the shelf Marketing 101 course -- but needs to be put together with its target group in mind. It is very conceivable that this program could be amortized across a number of developing nations. It's something that my former colleague, Paul Mulcahy, Vice President of Marketing Services at Campbell Soup could make a valuable contribution to. As soon as feasible, we should network together. The question is whether we could have a program ready for AGTA's perspective seminar date of August, 1994.

4. Liz, I found this visit to be extremely constructive and satisfying from the standpoint of feeding what is clearly a need in these projects -- that being an understanding of the marketing implications of many of the programs that are focusing on technical progress. Indeed, the teaming of technical training along with marketing provides a potent blend of business skills. While time is always a limited resource, I hope that I can make a contribution in the future in these areas.

Sincerely,

Anthony J. Adams
Director Strategic Marketing Research

TA/jb/a
Attachments

Anthony Adams
Director Strategic Marketing Research
The Coca-Cola Company
SUSTAIN Presentation to the
Second National Congress of the Food Industry and Expo
Guatemala City
April 20, 1994

THE GLOBAL CONSUMER TODAY AND TOMORROW

Slide 1

First I want to express my thanks for the invitation to be here to The Guatemalan Institute of Food Technologists, and its Second National Congress as well as my sponsors the SUSTAIN Program. I want to personally thank Clark MacDonald for being a host to me in this regard.

I come to you from a company that has had a "little" experience in marketing its products globally -- The Coca-Cola Company. Now there is a temptation for me to dwell almost solely on the experiences in learning of this great Company in my remarks to you tonight -- but I am purposely going to step back from my company roots -- at least for the majority of my talk -- to focus on the challenge and opportunity represented by my title "The Global Consumer Today...And Tomorrow".

The Global Consumer Today . . . Tomorrow

Sustain
April, 1994

TA0201A.94H/1

Almost no one today disagrees that our world community is getting smaller and smaller, thanks to communication technologies and transportation's mushrooming growth. My visit tonight is an example of the amazing transportation system we have in the world today. Yesterday I was at Coca-Cola Headquarters in Atlanta, Georgia in the US. This morning I gave a speech to the Advertising Research Foundation in New York City at 10:30am -- and here I am the same evening addressing this distinguished group in Guatemala City. This shrinking of the world from communication and transportation capabilities has created a growing sense of interdependence -- an interdependence that I feel is guiding political as well as economic decisions. In large part, improved relations between Eastern Block countries and China with free enterprise economies can be traced to this growing recognition of interdependence. The impact of the NAFTA Treaty will soon be felt here in the Western Hemisphere and even though our European friends have stopped short of such an historic step, the economic combination that eluded the Roman Empire and a number of other would be military conquerors over the centuries is now close to a reality in Europe. As we will see in a minute, thinking global is based on a number of common and converging consumer trends

reaching from Scandinavia to Spain from Italy to Japan, and from Australia to Guatemala.

Slide 2

Glocalization

We marketing people love to create new words, new buzz words for our trade. Here's a word for my presentation tonight -- glocalization. It combines the two opposite end trends of thinking global and acting local. Let's examine the case for the need to think global.

Slide 3

Population Growth

It seems like that we marketing researchers always like to start out with population analysis. In this recent United Nations study, we can see total population growth during the past decade of the '80's ranged from +28% in nearby Mexico down to a population loss of 2% in Germany with the rest of the countries bunched between 3 and 16%.

Slide 4

Population Growth - 2,000

Looking ahead to the current decade we again see Mexico leading with Germany bringing up the rear -- but in almost every case the growth rates are lower for the '90's than they were during the '80's.

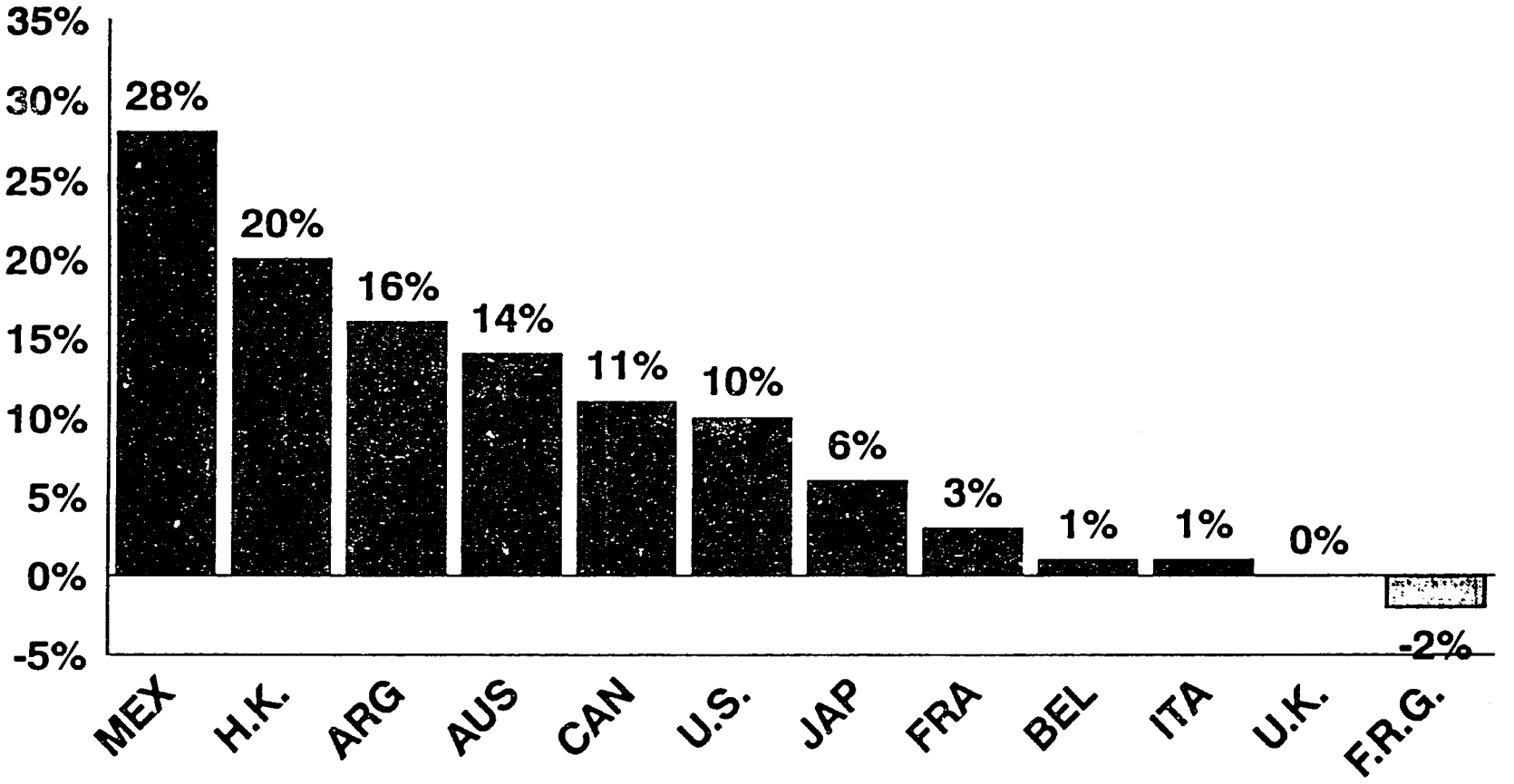
"*GLOCALIZATION*"

GLOBALIZATION

PLUS

LOCALIZATION

Population: 1980-1990 Growth



Source: United Nations

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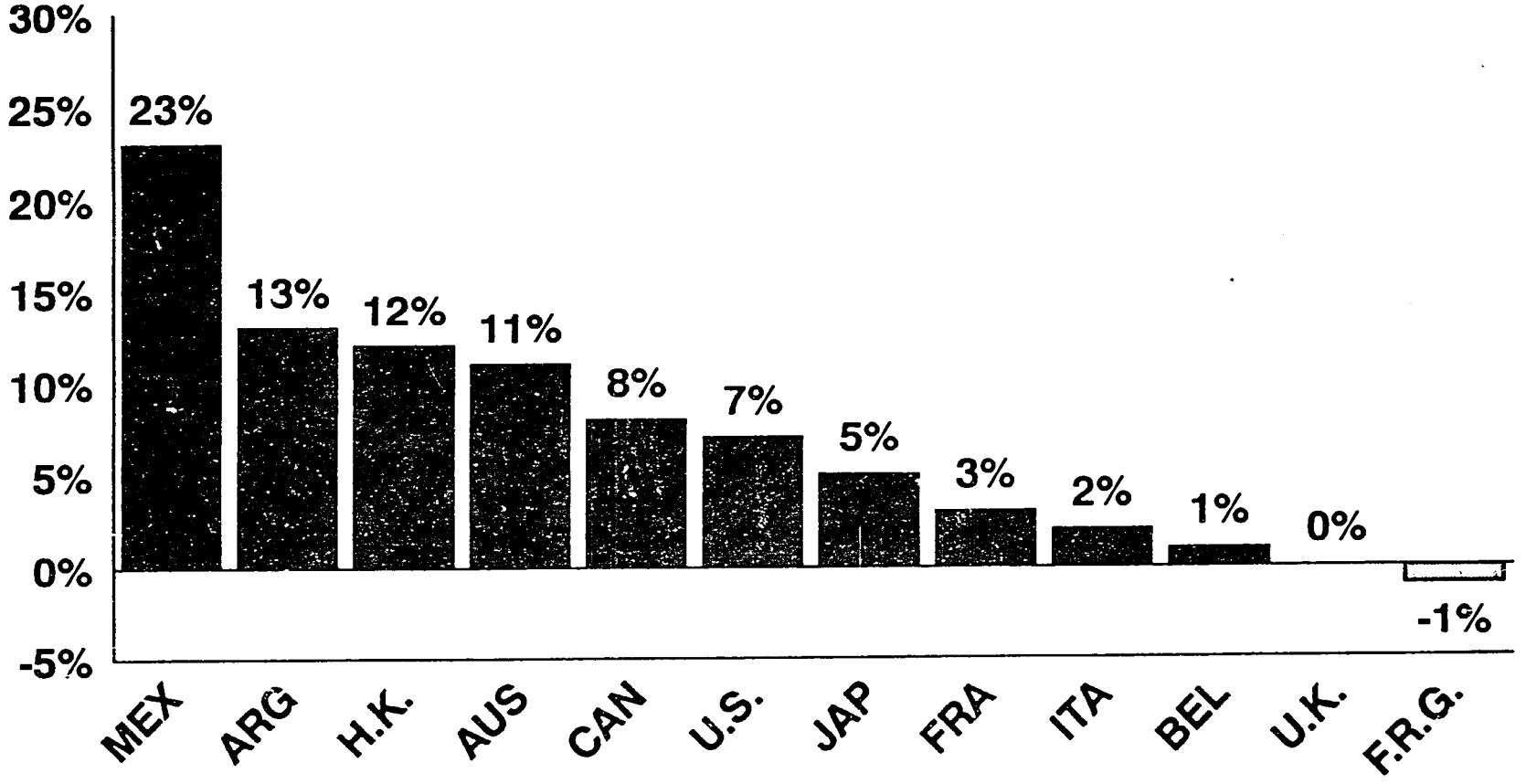
Population: 1990-2000 Growth



Source: United Nations

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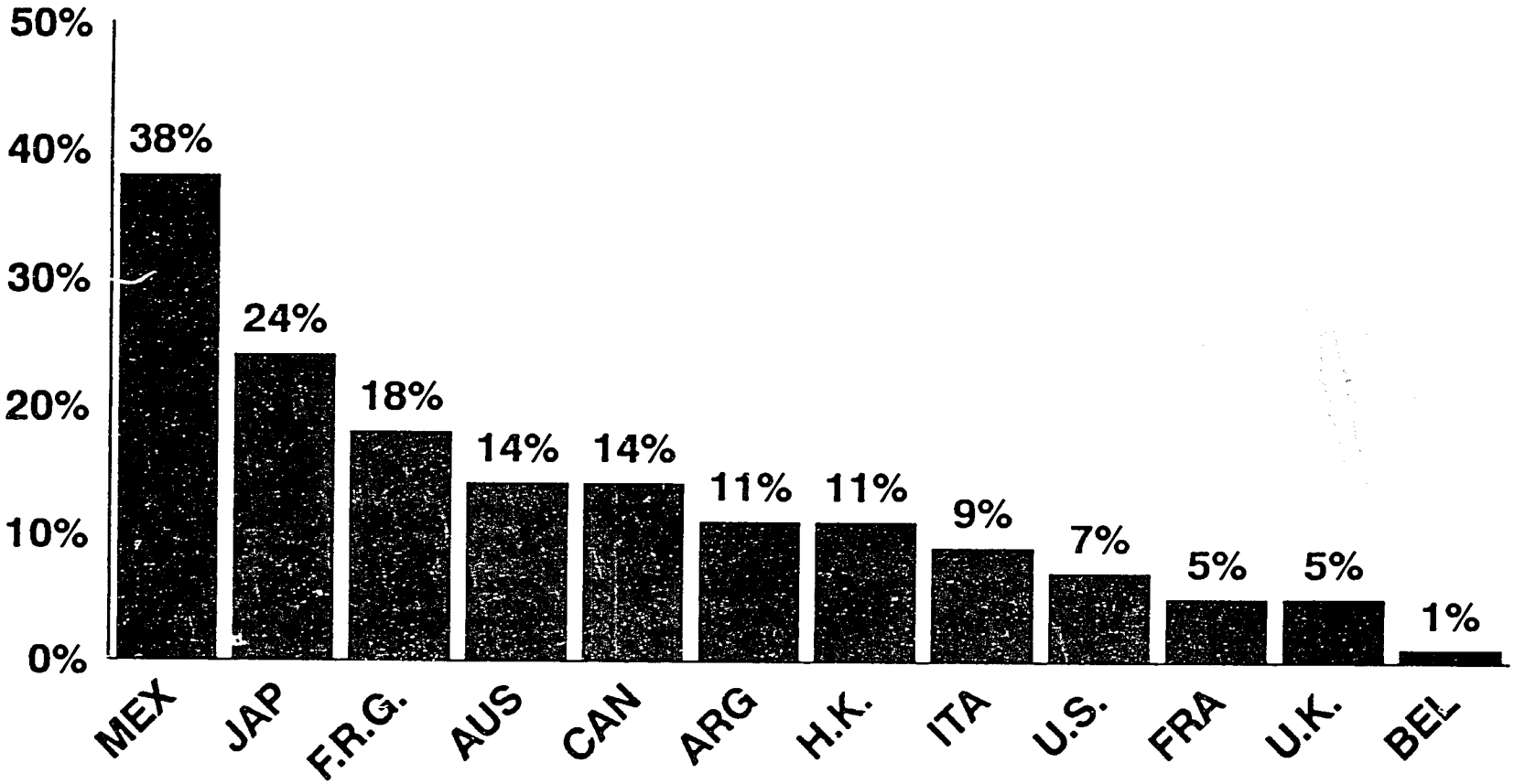
Population 55-74: 1990-2000 Growth



Source: United Nations

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Slide 5

Growth Rate for 55 - 74

Let's break these figures down and take a look at one specific age group -- our aging population of 55 to 74. In contrast to the overall population trends, we see considerably more consistency here with significant growth projected for almost all populations over the age of 55.

Slide 6

A Nation of Teenagers

Before I leave age, let me point out some rather significant differences which I feel have implications for all of us here this evening. In the US, the Baby Boom ended in 1964 but in Mexico as well as a number of other countries it ended much later. This has left the United States with a "bulge in the middle", demographers like to call this the "pig in the python", with more people aged 30 - 39 than there are teenagers. In Mexico with a much younger median age, we can see of the continued importance of children in the population.

Slide 7

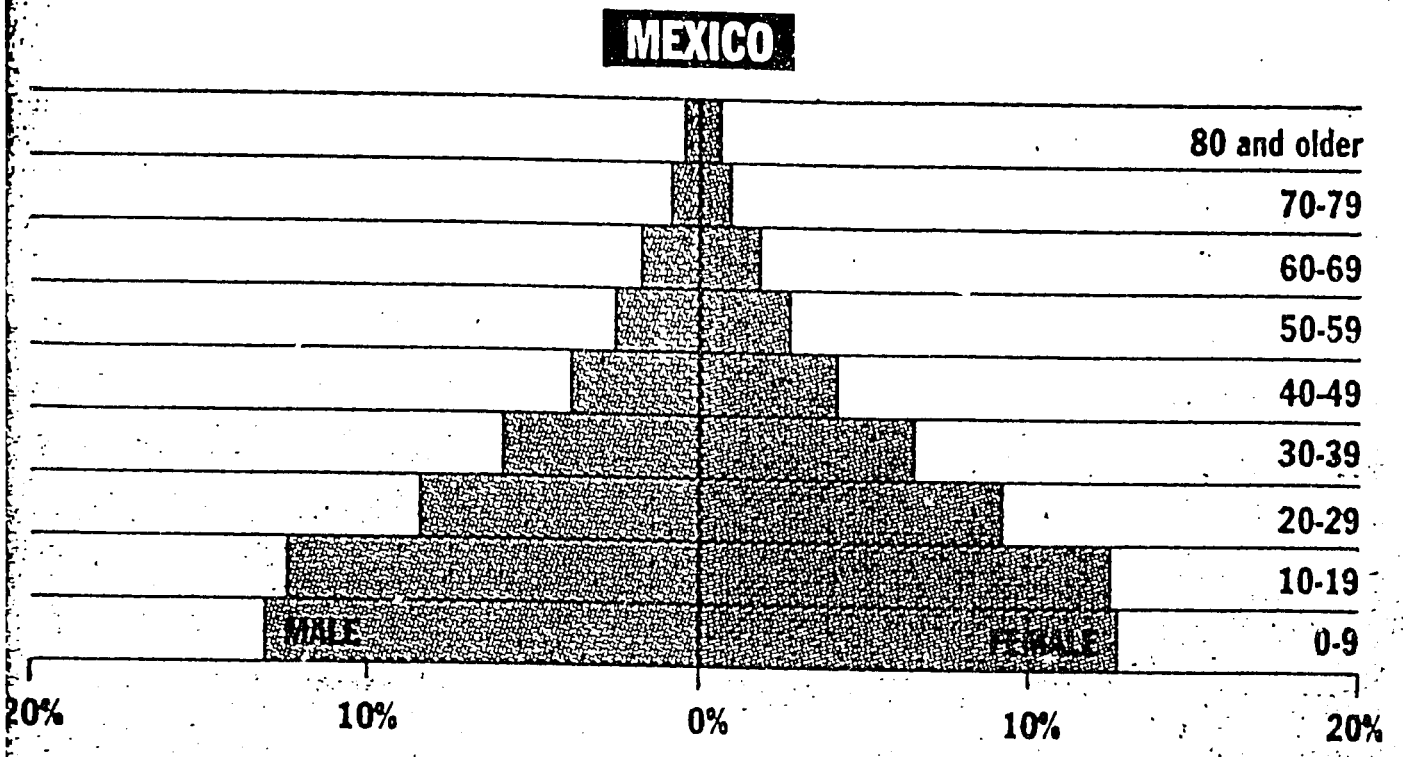
Costa Rica

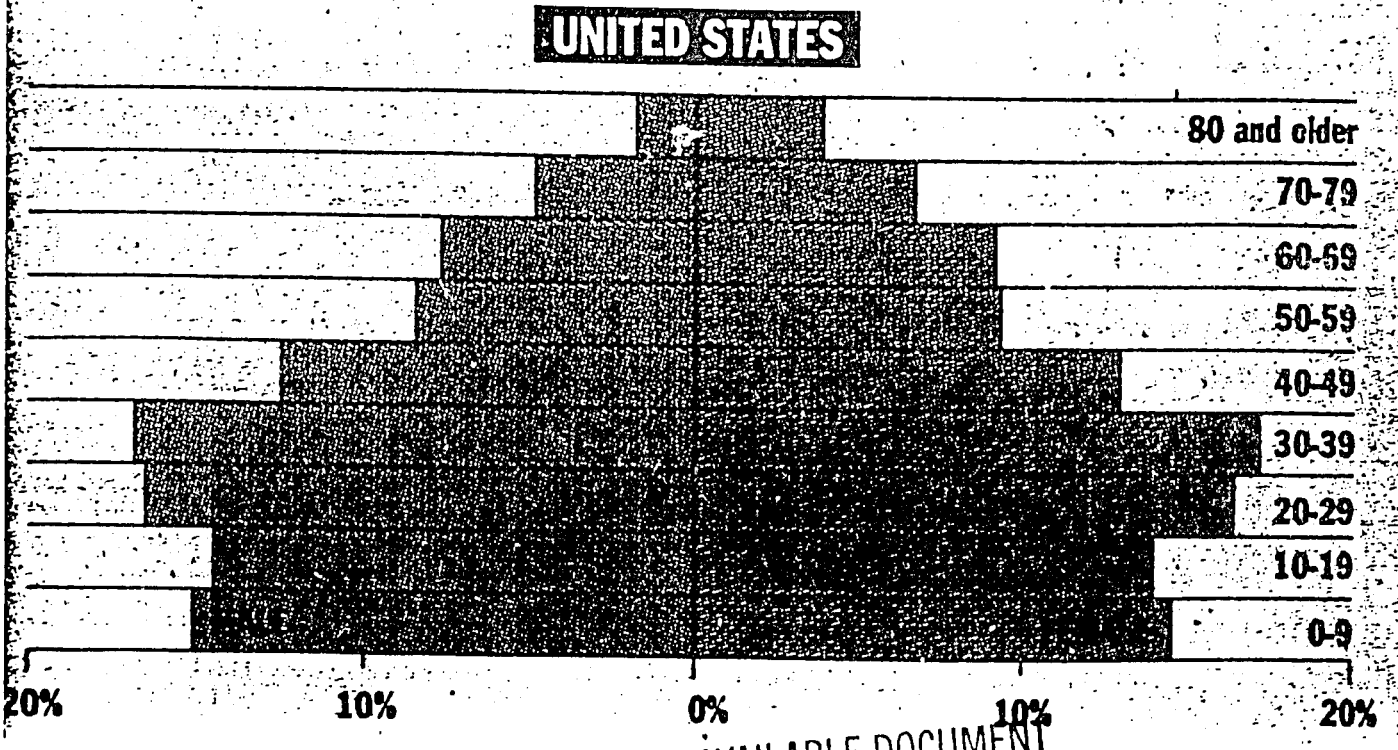
And if we look at the age distribution for Indonesia

A Nation of Teenagers

In the U.S., the baby boom ended in 1964. In Mexico, it ended in the mid-1980s.

(population of the United States and Mexico, by age and sex, 1990, in percent)





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Costa Rica, 1992

The bulk of Costa Rica's population is under age 34, providing a large pool of well-educated workers -- and consumers -- for the decades ahead.

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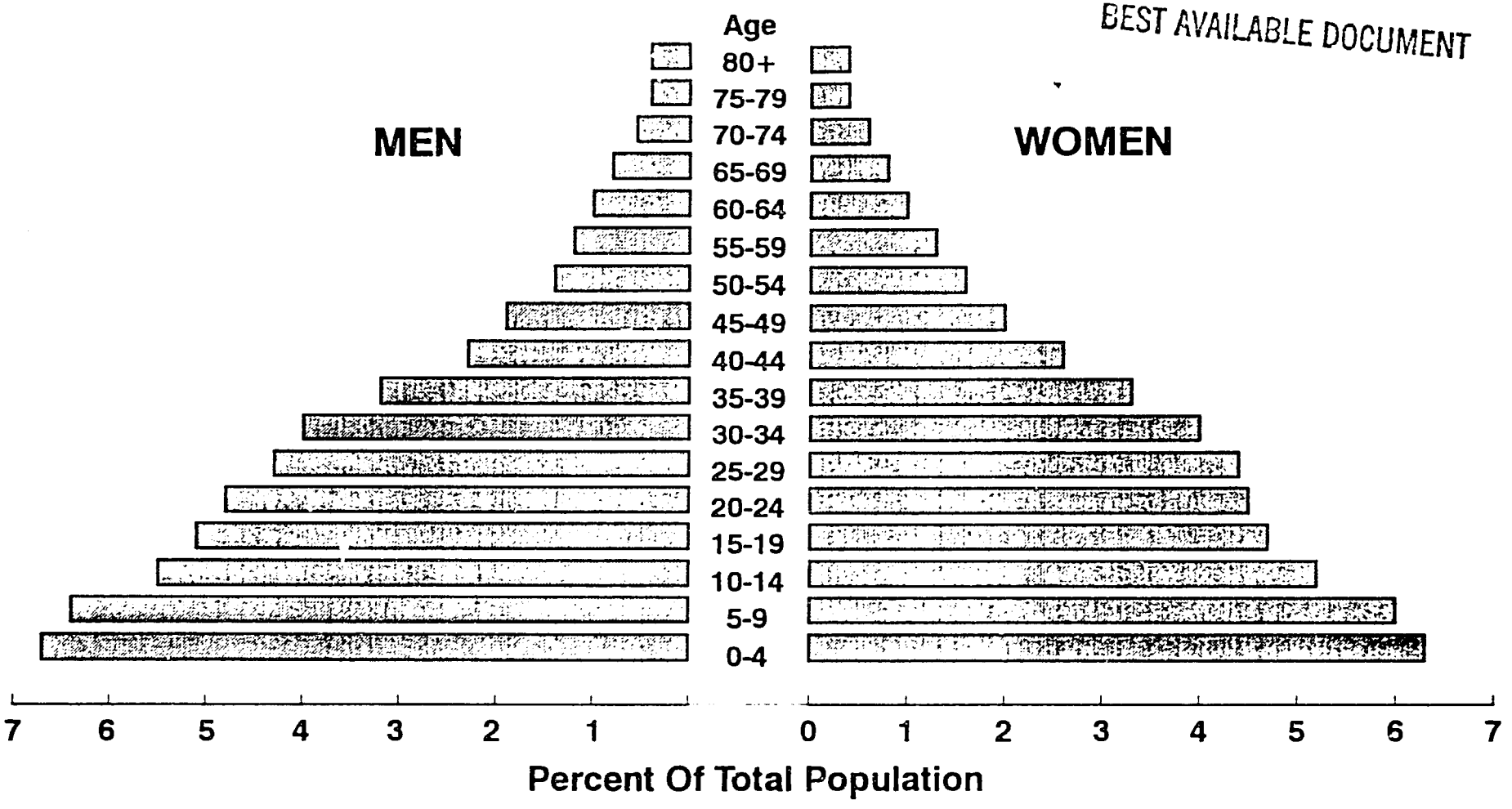

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Slide 8

Indonesia

Or for neighboring Costa Rica, or even Guatemala -- the overwhelming message to us is the importance of children in the population. It is a true paradigm. This immediately suggests to us the importance of child nutrition and the importance of an adequate food supply at affordable prices as well as the need for nutrition education.

Slide 9

GIRA Worldwide Consumer Study

One of my key messages is captured in a recent study done by Gordon International Research, a Swiss based marketing research company which recently did a study on consumers and nutrition. Their summary was that there is no denying that we are different around the world -- but it's equally as clear that we are becoming more similar. In almost every country, we see older populations with median age on the rise, more working women, rising income combined with drops in the birth rate and smaller families leading to more child independence, and unfortunately in the view of many sociologists, a growing strain on the family structure. We are encouraged to see worldwide rising levels of education.

Indonesia, 1992

The typical pyramid shape shows the bulge of population in the younger age groups.

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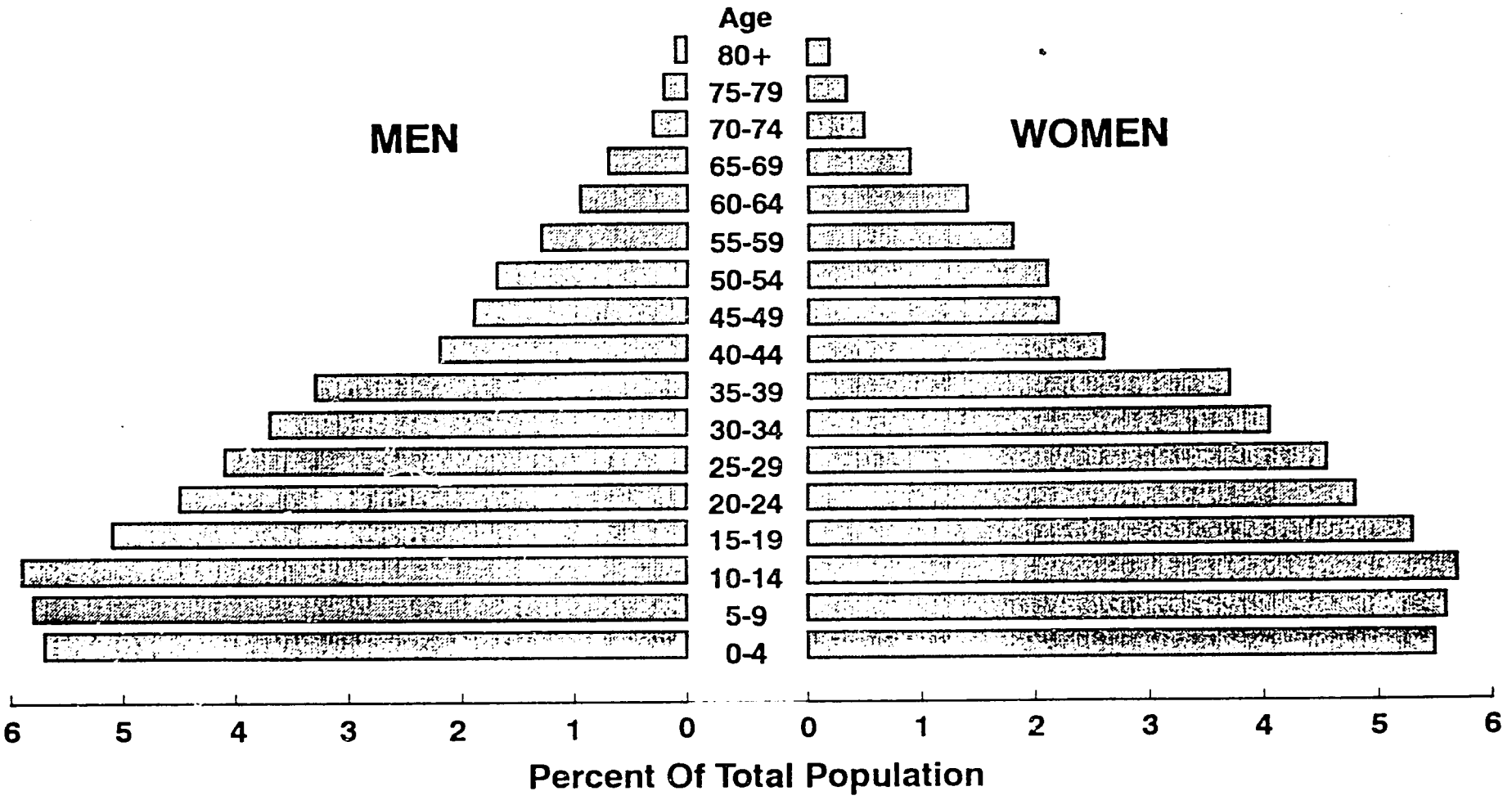

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GIRA Worldwide Consumer Study

- Key finding: We are different, but we are becoming more similar
  - Aging populations
  - More working women
  - Incomes are rising
  - Smaller families/birth rates falling
  - More child independence/strain on family
  - More education
  - Communications converging
    - Motion picture
    - TV
    - Telephone
    - Computer

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But perhaps the most significant growing similarity is coming from converging communications, whether that communication is motion pictures, television, telephones or the computer.

Slide 10

Germans and French

I don't want to create the impression that the world has been homogenized quite yet. As this recent study reported in the Journal of Advertising Research shows, our German friends still want a similar routine in their lives. It ranks No. 1 in Germany -- but the French could care less as they rank routine 23rd in importance. Germans also value having beautiful things in their home to a much greater degree than do the English, but keeping busy is evidently not that important to today's German (my guess is they are already busy).

Slide 11

Families With Duel Incomes

Families with duel incomes are fast becoming a necessity in many of the developed nations including the United States with growth also in Europe and Asia.

Slide 12

Women Working Trends

With the exception of Japan the trend is the same around the world...more working women. Now in most instances, the motivation for women working is economic -- the second paycheck. But in a recent

Germans Want A Routine, The French Don't

	Germany	United Kingdom	France
A. Having products which work as expected.	2	1	1
B. Being assured an appliance is easy to operate before you buy it.	5	2	2
C. Having a familiar routine.	1	10	23
D. Having beautiful things in your home.	3	17	9
E. Having something to keep you busy.	21	6	9
F. Saving money whenever possible.	6	4	10
G. To have possessions like those of your friends	28	28	29

Data: Journal of Advertising Research

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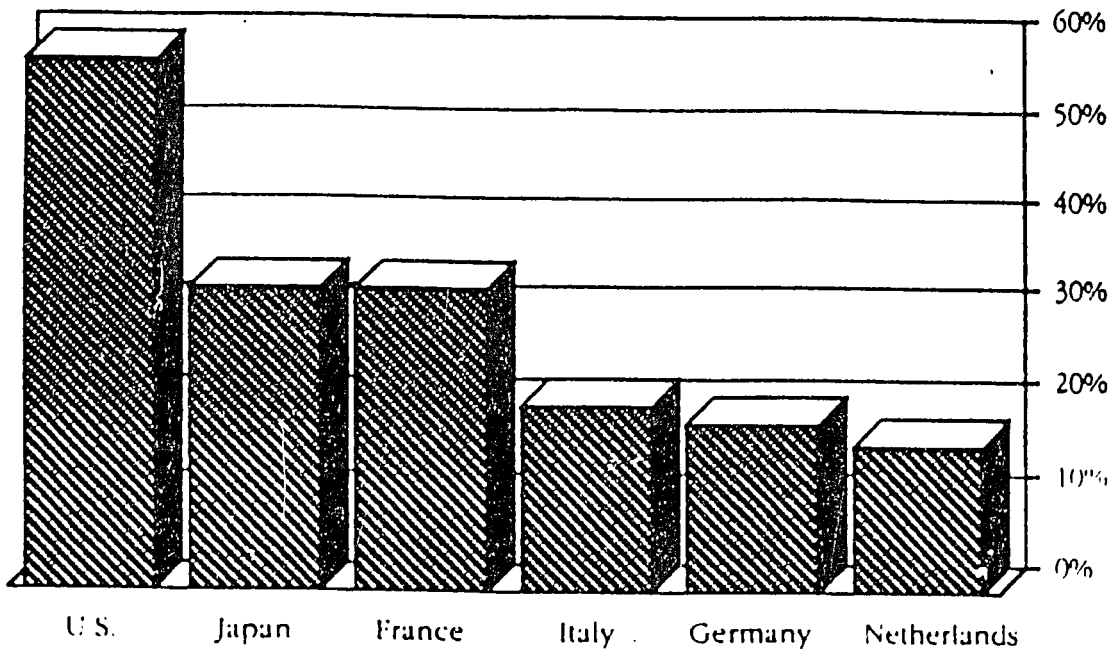
Figure
Families with Dual Incomes



Source: Wolff et al. (1992)

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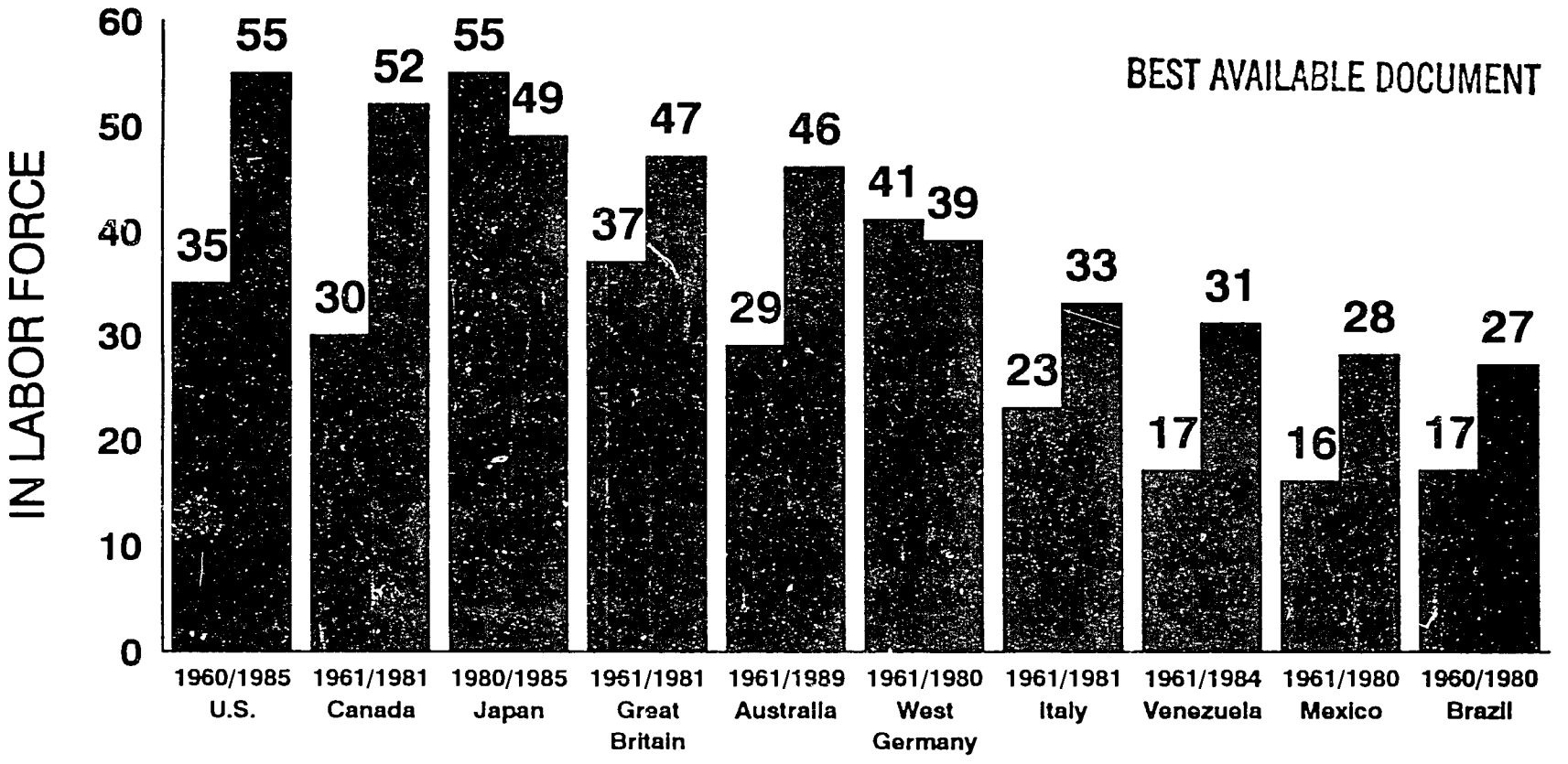
What Percent Of Women Are In The Labor Force? Trends



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study by Rena Bartos in her book "Marketing To Women Around The World", she emphasized that the psychic rewards of work are becoming an increasing motivation for women, whether it's Mexico, Venezuela or the US. These women say that pursuing a career gives them a feeling of personal satisfaction and self worth.

Slide 13

Nutrition Concern

Here's a little insight in terms of nutritional concerns from the GIRA Study that I referred to earlier. As we can see, there is still some divergence in the levels of "claimed" nutrition concern. The US registers the highest level while countries that have centuries of food history and cruisine show much lower levels of overall nutrition concern. For instance Italy and France.

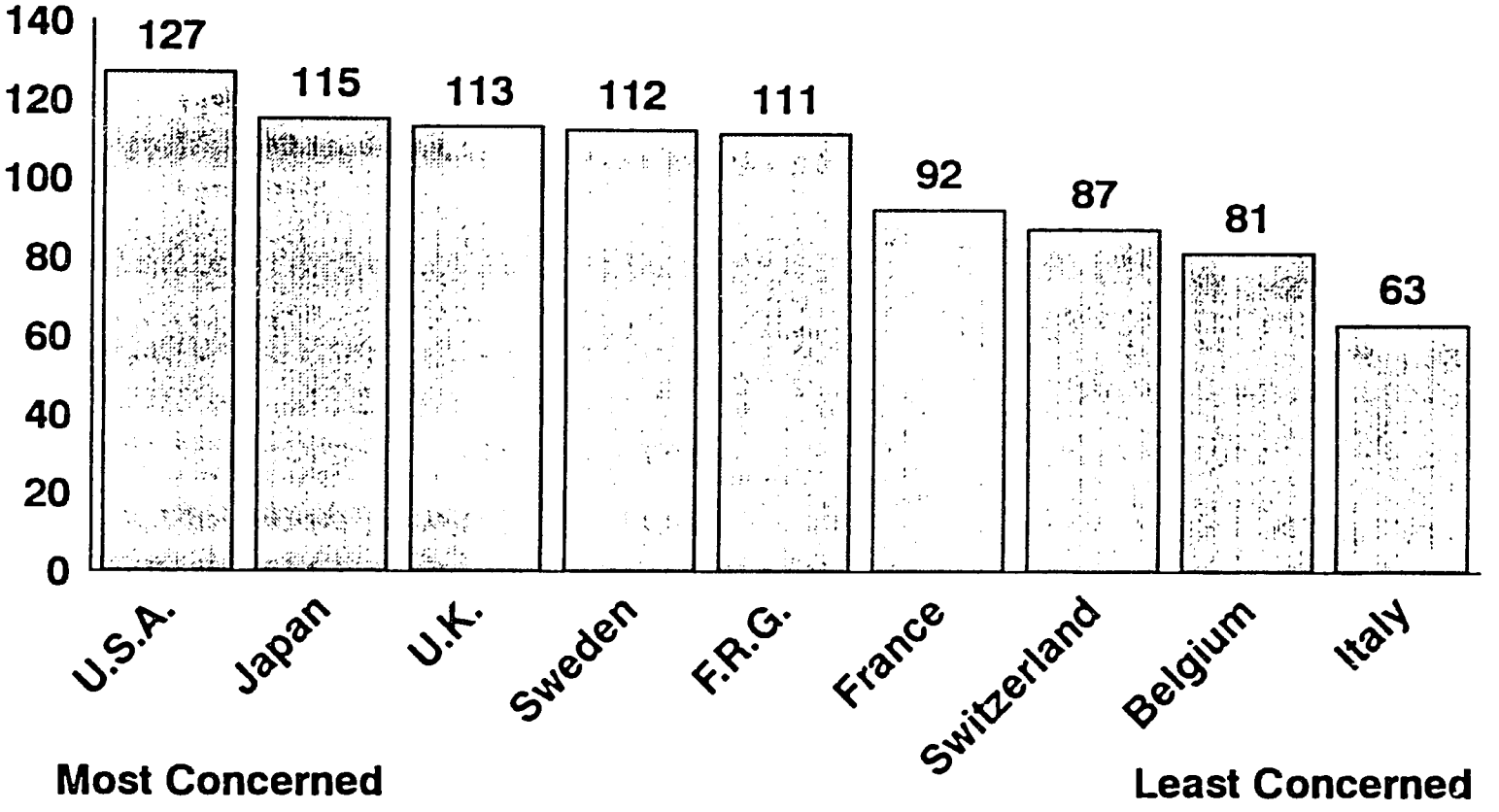
Slide 14

Cultural Convergence

It used to be that the only common denominators between cultures were similarities in centuries old habits and customs of "feasting", "music" and "ritual", but today a study by Mandel and Ferrell suggest that the world is developing into a culture of consumption, "from Syria to Singapore people are learning to consume American style" -- and I don't mention that as a necessarily trend for the better.

Index Of Overall Nutritional Concern

(9 Country Average = 100)



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Cultural Convergence

- Old universals
  - Feasting
  - Music
  - Ritual
- Culture of consumption
  - "From Syria to Singapore, people are 'learning' to consume 'American style' " *

** Mandel and Farrell 1992*

Slide 15

Converging Values

Convergence is extending into attitudes towards work itself. In the US, a new generation appears willing to trade pay for more freer leisure time, with similar patterns showing up in research done in Israel as well as a country with one of the strongest work ethics in the world -- Japan.

Slide 16

Ted Levitt

Perhaps Ted Levitt puts this in best perspective when he suggests that when we are planning, cultural differences really don't matter, given the fact that there is almost a universal consumer drive today for low cost , high quality goods that are reliable.

Slide 17

Convergence In Shopping

Should it surprise any of you, having seen the growth in working women, the growth in dual wage earning households, the increasing stress of trying to be a "super mom" as well as a bread winner that current attitudes towards shopping are converging from Turkey to Jordan to Singapore and the US. Women are looking at the whole food shopping and preparation task in terms of saving or even "buying time" in order to meet other demands. In the US, where a visit to the supermarket was a social event in the '40's and '50's -- with discussion with friends about

Converging *Values* -- The Work Ethic

- *U.S.* -- Willing to trade pay for more free time
- *Israel* -- From "work first" (1970) to work and leisure equal
- *Japan* -- Government work week cut from 45 to 40 hours

In planning, cultural differences don't matter

- Consumer drive for *low-cost*, *high-quality* goods that are reliable

- Communication and transportation contribute to convergence

* *Ted Levitt*

Convergence In Shopping And Attitudes

- Recent study in Turkey, Jordan, Singapore, and U.S. showed common shopping attitude pattern*
  - Shopping more of a *chore*
  - Shopping adds *stress* to life

** Fram and Ajami*

16.9

children, husbands, and pets, today's US food shopper is virtually on roller skates -- wanting to get in and get out as soon as possible. (Polish women story)

Slide 18

Convergence Frigidaire

We are even seeing convergence in areas of behavioral habits -- in Europe the emphasis has shifted from different engineering of washing machines to a focus again as we said in food on price and on quality.

Slide 19

Breakfast Cereals

A generation ago no one felt that breakfast cereal, long a staple of the US diet would ever become popular in areas where breakfast is a completely different meal, such as in Europe or in Central or South America. But there is no denying that most of the growth for Kellogg's today is coming from growth of the cereal habit in just these places.

Slide 20

Moving Toward Free Trade

While trade disputes continue to make headlines. A . new paradigm is emerging which suggests greater free trade based upon dividing economic tasks among countries, according to their natural resources and skills. Let me repeat because I think this is a driving force in tomorrow's export and import trends -- dividing the economic tasks among countries

Convergence

- Frigidaire washers -- Europe

  - Front loading, top loading, cycles, size differences

TO

  - Price, quaiity

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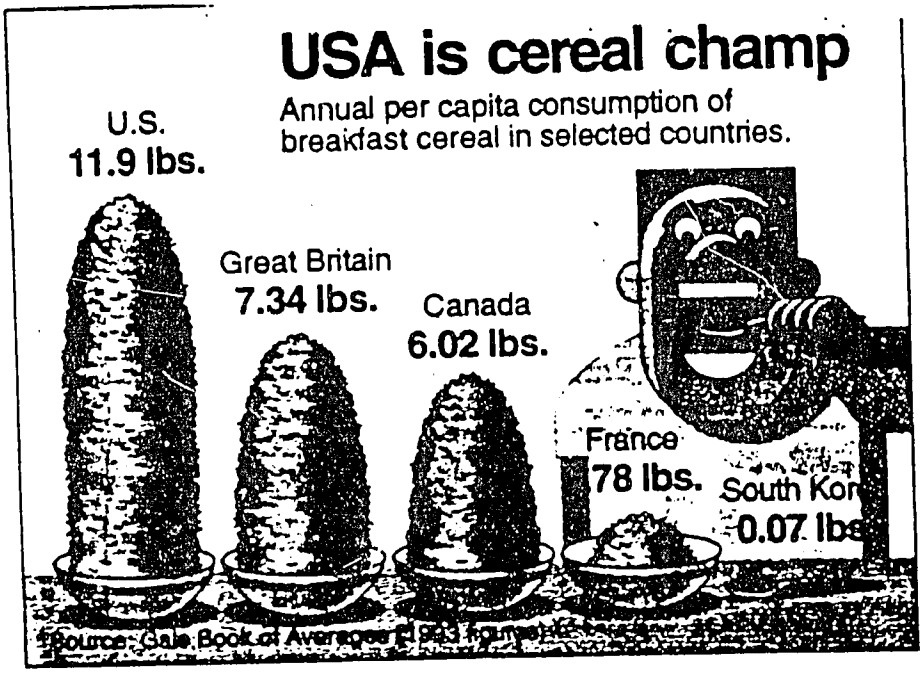

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We are Moving Toward Worldwide Free Trade

- Dividing economic tasks among countries necessary for a global economy
- Trade deficits could become meaningless in a true world economy
- For those of us in the Americas, a shift from Atlantic to Pacific
  - By year 2000, Europe will account for only 6% of world's population
  - Cultural shift as well as economic

127

according to their strengths in terms of agriculture, production or work force. One of the primary benefits could be that the whole notion of trade deficits will become meaningless in a truly world economy. For those of us in Guatemala and in the US, we expect a shift in focus from our Atlantic shores to the Pacific Ocean not far from here. By the year 2000, Europe will account for only 6% of the world's population -- one of the factors which undoubtedly is guiding them toward some type of economic combination.

Slide 21

Market Basket

What will it take to compete in tomorrow's global food economy? Could I suggest to you -- yes, suggest rather strongly -- that a key will be accessing the growing availability of information from the food marketplace. I am going to source a number of pieces from a publication called Market Basket -- but there really are a hundred similar publications who are generating the kinds of information you and I are going to need to develop strategies to compete successfully for a slice in tomorrow's market basket.

Slide 22

Cartoon On Medieval Focus Groups

What kinds of information are we looking for to develop and implement our strategies for the '90's and beyond. First could I suggest that marketing research has been with us for a long time as suggested in this

MARKET: BASKET

The newsletter of global purchasing power

VOL. 1 NUMBER 3 — A MONTHLY PUBLICATION OF W-TWO PUBLICATIONS, LTD — MARCH 1994

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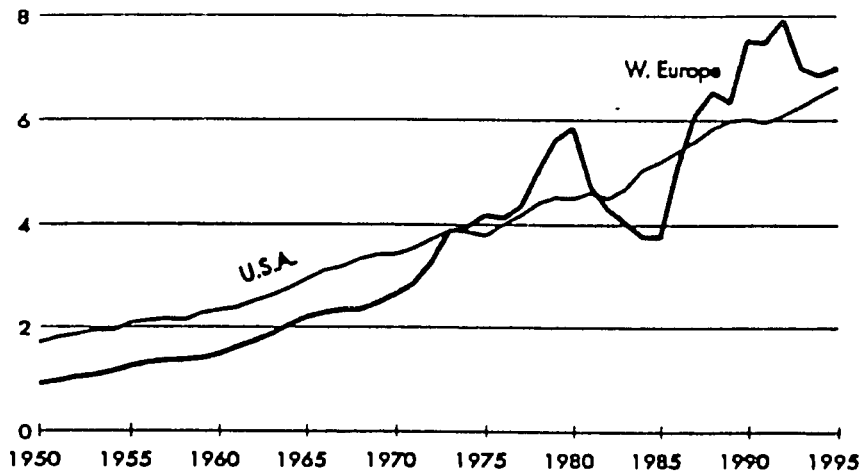
TRACKING EUROPE'S GROWTH: FOREX VIEW

GDP in trillions of 1993 US dollars, current foreign exchange rate (Forex) basis

Viewed on a Forex basis, western Europe's economy exceeds the US.



Note: Excludes former East Germany. See Table 3, page 4 for list of countries included.
Figure 1 Source: Penn World Table, World Bank, OECD

By conventional measurements, western Europe may claim to be the world's largest economy.

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Figures:
1 GDP, Europe and U.S.A. (Forex) 1
2 GDP, Europe and U.S.A. (PPP) 2
3A GDP per capita (PPP) by country 3
3B GDP per capita (PPP) and population by country 4
4 GDP per capita as percent of U.S. and growth rate by country 1950-1993 5
5 Growth scenerios for Europe and U.S., 1993-2015 7
6 Price indices for consumption categories by country 6

Europe's Economy Commands Attention

Whether you are developing markets in Europe or whether European companies are competing with you in far-flung countries such as China or Vietnam, the economic activities and policies of western Europe should command your attention. As it moves toward economic integration under the EU (formerly EC), western Europe can claim to have passed the U.S. as the world's largest economic power. Calculated on a foreign exchange rate (Forex) basis, western Europe's GDP in 1993 was about $7 trillion, compared to about $6.3 trillion for the U.S.

It was not always so. In 1950, five years after World War II devastated Europe and its economy, the GDP was $0.9 trillion for Europe and $1.7 trillion for the U.S. To see how the relationship

Medieval focus group

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little cartoon as our Viking friends plan their next raid on England. Our focus group moderator asks, "when looting an English Village, what kinds of products do you grab first?"

Slide 23

Price And Index For Seven Consumption Categories

On a more serious basis, we should be interested in the pricing of a typical market basket in a country in which we sell our goods. In this analysis from the Organization For Economic Cooperation, we can see that average food cost in Turkey and Portugal is extremely low, but much higher in Scandinavia, Japan and Germany. Relative spending on other key budget items such as health and education become important in understanding the needs of each of these populations.

Slide 24

World Poultry

If we were growing or processing and exporting chicken products, we'd want to know production trends around the world -- and even more importantly where the sources of that production are and whether they are growing or not.

PRICE INDICES FOR 7 CONSUMPTION CATEGORIES

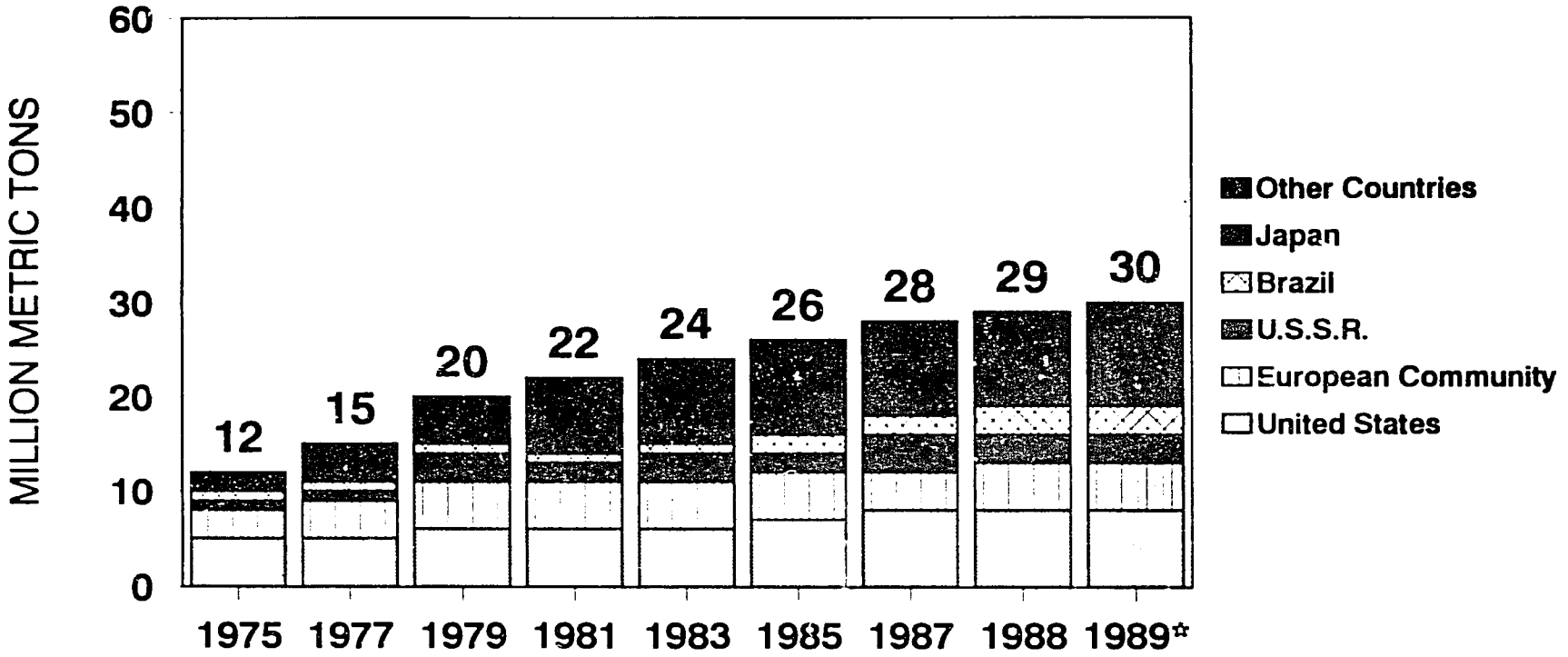
Price indices for equivalent "baskets" of purchases. Left column is weighted average across all categories.

	Average	Food	Housing	Trans-port	Health	Other goods & services	Clothing	Edu-cation
Turkey	41	51	27	40	36	55	66	26
Portugal	57	72	25	90	61	63	100	37
U.S.A.	92	82	104	83	124	84	75	107
U.K.	92	97	78	128	84	89	93	93
Spain	95	97	68	104	81	118	125	57
Italy	101	99	64	113	93	121	133	100
France	107	108	96	119	83	118	151	106
Germany	113	103	121	119	106	113	130	110
Japan	115	134	140	109	68	119	110	107
Sweden	138	170	124	132	136	141	115	137
Switzerland	144	153	136	135	155	147	142	134

Table 6

Source: OECD

World Poultry Production Has More Than Doubled Since 1975



* Forecast

Source: Foreign Agricultural Service

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Slide 25

Brazil Tropical Fruit

If we were growing or processing fruit, we'd certainly want to know what was going on in a country that produces over 15% of the world's fruit -- these projections from Brazil may be optimistic -- after all they're from a Brazilian trade group -- but if I was growing or processing papayas, I might want to verify that Brazil projects to grow more than 6 times as much papaya in the next 5 years as they are today.

Slide 25A

British vs. US Processing

I think of particular interest to this professional group is the differences noted in how some countries approach food processing. In the US, since Clarence Birdseye pioneered the concept of frozen vegetables in the '30's and C.S. Swanson created the concept of frozen dinners and pies in the '50's, frozen food has been a huge industry. Heat processed products, led by companies such as my former company Campbell Soup have remained popular in large canned and jarred food sections. And since consumers tended to shop weekly or even less frequently, this met the needs of long shelf life products.

In many other geographies around the world, including Europe, Asia and Latin America, consumers shop much more frequently, thus often requiring only

Brazil Tropical Fruit
Projections 1995-2000

	Tons		Millions US$	
Fruit	1995	2000	1995	2000
Mango	18	49	$12	$32
Lemon	76	199	24	64
Avocado	11	36	5	16
Melon	16	38	7	17
Papaya	20	128	10	66
Grapes	93	250	93	250

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minimally processed chilled products. Chilled food sections in the UK are much more developed than in the US.

Slide 25B

British vs. US Processing

Interesting enough, there's also a difference in the UK vs. US approach to product design research. In the UK this professional work is assigned to outside research firms, while in the US, food suppliers and universities fill this role.

Slide 26

Magazine Advertising

As a marketing person, I'd want to know how to reach my target population with whatever product or service I was producing. Here we can see projections for magazine advertising in a number of countries. This kind of marketing information is just becoming widely available. It offers the opportunity for increased effectiveness -- and especially increased efficiency in bringing our sales message to our target population.

Slide 27

Blank Screen

PLAY 1/2" VCR - But rather than go through a presentation in Marketing 101, let me share with you a little from my own company - Coca-Cola. While many other companies aspire to become global, Coca-Cola got a head start on its competitors through a lot of

Magazine Advertising

In U.S.$ (millions)

Country	1992	1993	1994	1995
Chile	$23	$27	$32	$37
Colombia	29	37	46	58
Mexico	100	140	168	210
Venezuela	15	16	19	23
Puerto Rico	16	17	17	17
For comparison:				
China	43	84	157	220
United Kingdom	3,178	3,227	3,388	3,580
United States	10,651	11,290	11,967	12,685

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hard work and innovation way back earlier in this century. Let me share with you a brief 5 minute history of how this came about and also offer a short message from Mr. Goizueta, on our Chairman's vision for the rest of the '90's in terms of our global business (SHOW TAPE).

Slide 28

Look For Similarities

Finally, let me share with you a credo that I feel keeps a balance between the notion of "thinking globally and acting locally". It is that as we research individual markets of opportunity that we look for similarities with other populations -- but that we always respect the differences in the countries as we find it. I will finish with one final message from Coca-Cola -- it's an advertisement that is old but in my mind improves with age. It communicates better than words can the whole notion of the global community that we all are members of. I want to wish each of you success in your individual ventures in the food industry -- and I certainly wish success of your fine organization. Thank you.

Blank Screen

Show Coca-Cola Commercial

TA0412a

PESTICIDE RESIDUES IN PROCESSED FOODS

DR. CHRISTINE CHAISSON

Pesticides are important tools for the production of valuable foods, making them available to the distant markets at economical prices. The pesticides are also one of the biggest problems which may cause your product to be rejected by the market which you seek to capture. Pesticides-and food additives-can be used and can be a great advantage to your industry if they are used wisely and you create an industry which is respected and aggressive in the world market.

Your industry must be responsive to three masters:

1. The governments
2. The business you sell to
3. The individual consumer

Each has a different demand for you and each is powerful.

The regulatory agencies of each government will decide which pesticides are permitted to exist on individual crops and processed foods. They will also enforce those rules in a system which can reflect contemporary political and economic forces of that country.

The businesses expect that your product will meet the basic regulatory standards for pesticide residue phytosanitary standards, quality and labeling/packaging. In addition, they may also demand additional standards be achieved more strict pesticide residue limits, more strict phytosanitary standards and uniformity of appearance or composition factors.

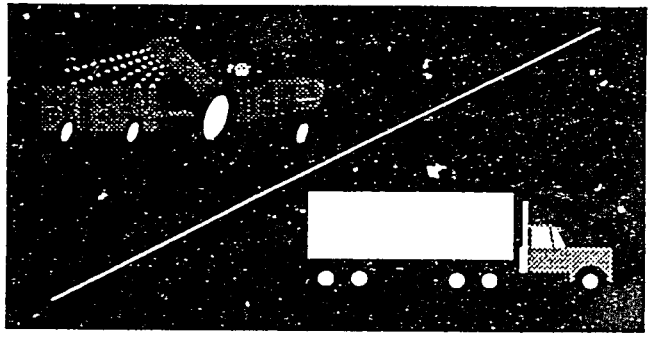
The consumer is the final challenge. Their standards must be met on their criteria. They may add value to produce with little or no pesticide residues in some markets. But the consumer is demanding a dependable supply of product which is free of insects or pests, unblemished and high quality.

Internal systems which provide solutions to these demands must be developed by exporting countries in order to be competitive in the global market. These systems must include education programs for the growers, shippers and processors. It must include effective enforcement systems, excellent laboratory facilities,and development of a program to increase the overall confidence of the consumer in Central American food products.

Potencial para "sobre-tolerancias" **Producción**

- Residuos en el suelo
- Deriva
- Pesticida equivocado
- Sobre-applicación
- Contaminación
- Mal etiquetado

TAS



Potencial para "sobre-tolerancias"

Cosecha/Transporte

- Sequridad del operario
- Contaminación du vehículo

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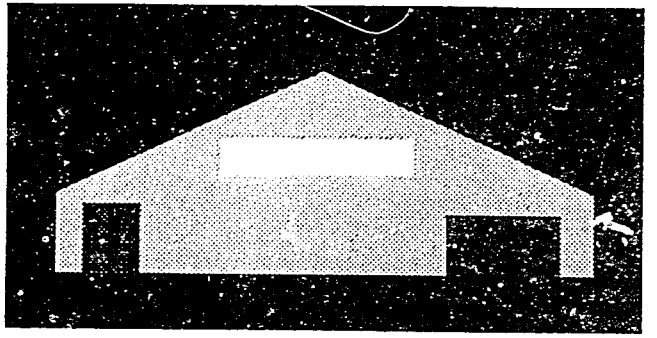

Potencial para "sobre-tolerancias" **Almacenajen**

- Mal uso del pesticida
- Mezcla

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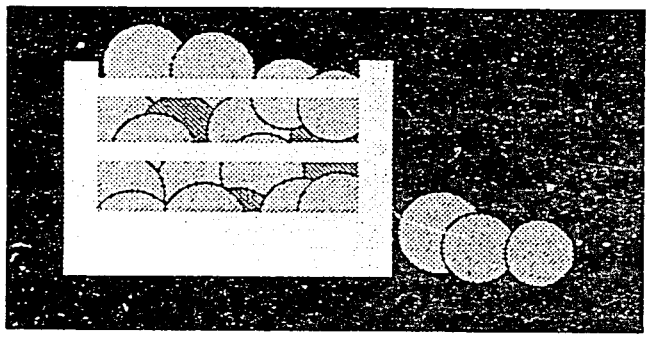

Potencial para "sobre-tolerancias"

Bodega de Almacenaje

- Securidad del operario
- Mezcla
- Agua de lavado

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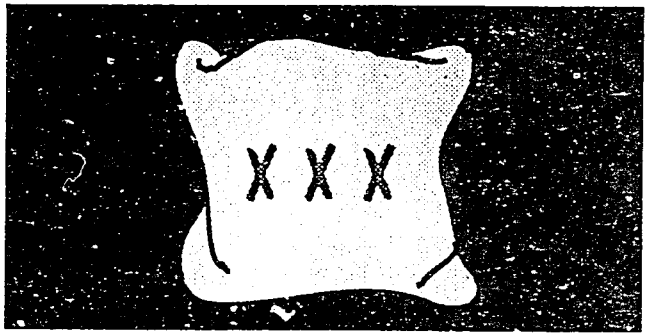

Potencial para "sobre-tolerancias" **Empaque**

- Contaminación

TAS

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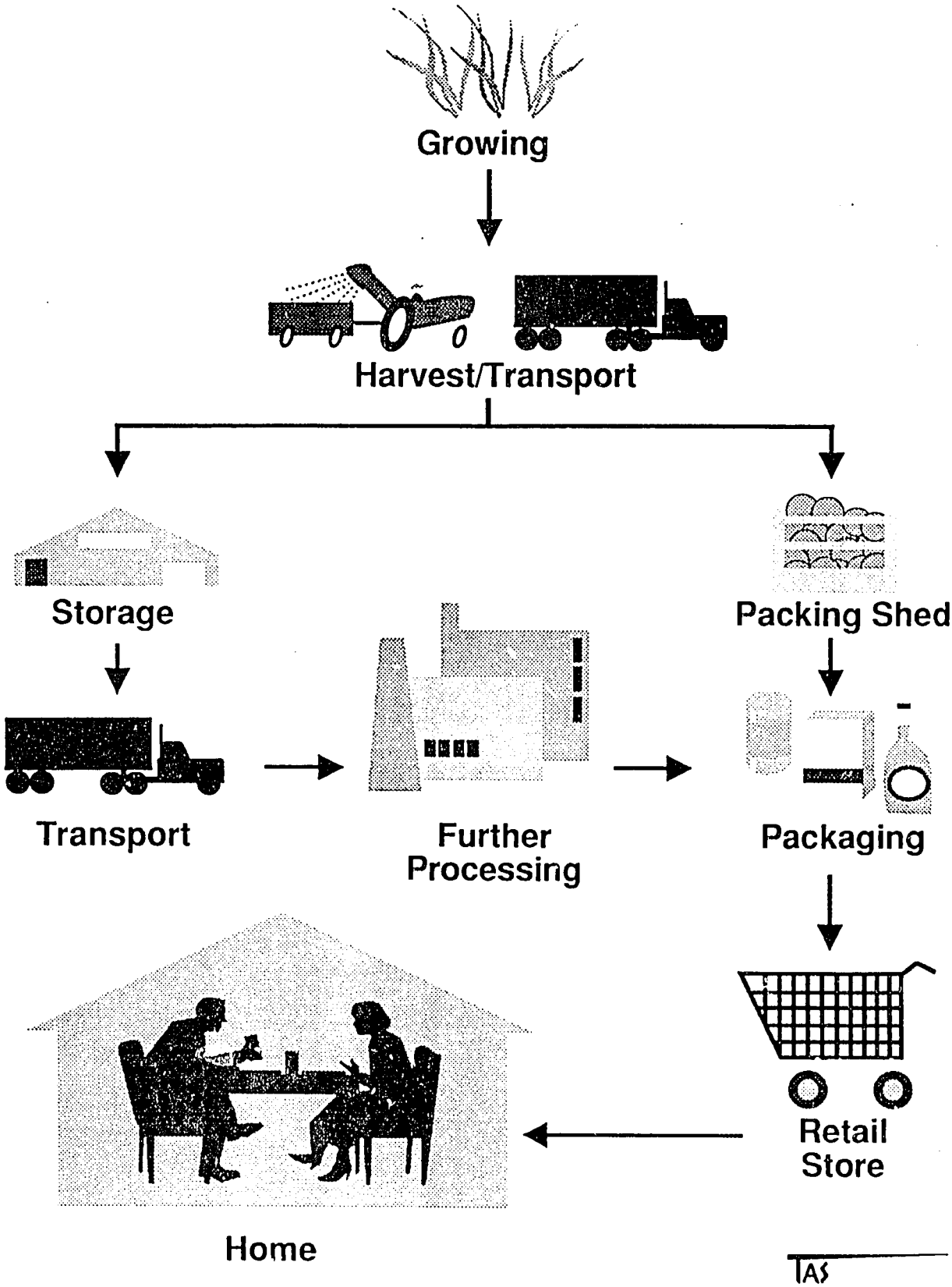
Food System



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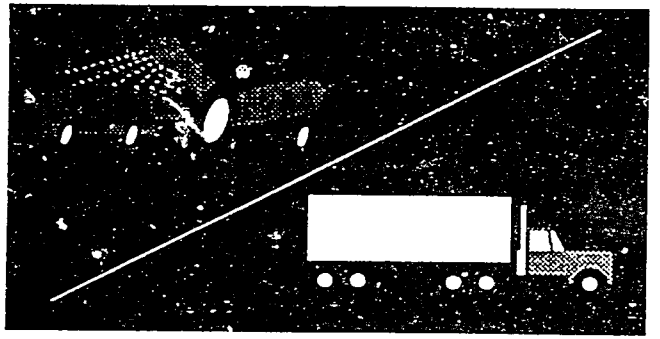
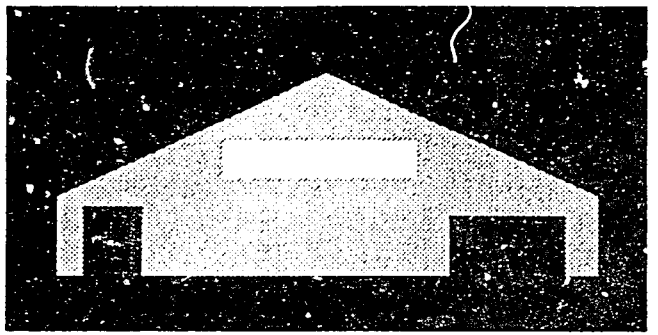


Potential for Overtolerance
Harvest & Transport

- Preharvest Interval
- Vehicle contamination

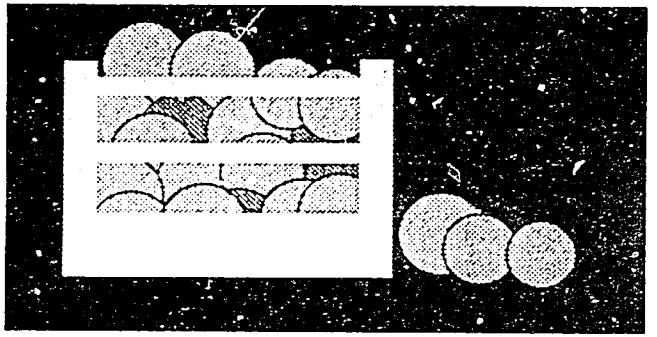
TAS



Potential for Overtolerance
Storage

- Pesticide misuse
- Blending

TAS

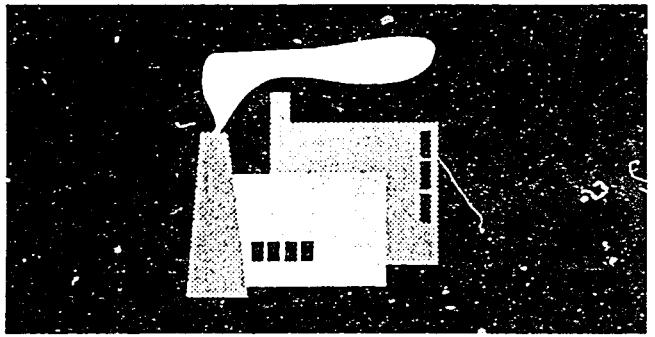


Potential for Overtolerance

Packing Shed

- Blending
- Water

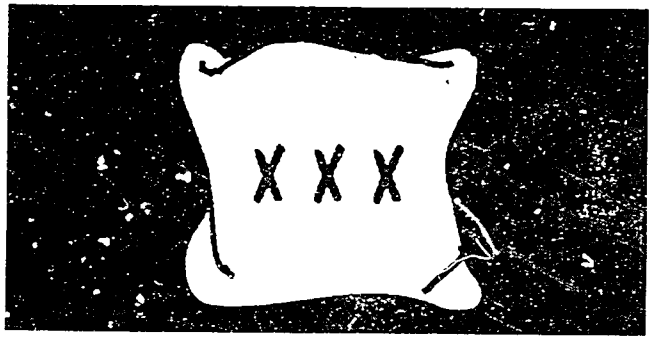
TAS



Potential for Overtolerance
Further Processing

- Pesticide concentration

TAS



Potential for Overtolerance
Packaging

- Contamination

TAS

DR. CHRISTINE CHAISSON
Hostess: Karin Guerra (Tel. 762967)

SCHEDULE

DAY	TIME	ACTIVITY
19	11:48	ARRIVAL. Juan Carlos Morales
20	08:00 - 12:00	UNIVERSIDAD DEL VALLE. Patricia de Palomo food science - food tech.
20	14:00 - 16:00	Central Amer. Nutrition Inst. INCAP Dr. Luiz Elías (done a lot of work in Bend) basic research up to now not much applied funded by US & U.N
21	09:00 - 11:00	LUCAM. Licda. Eugenia Canahuí Gov't. organization - compliance lab.
21	15:00 - 17:00	COMITE NACIONAL DE ARVEJA CHINA. sweet peas
22	Morning	* Conference at Congress
22	Afternoon	Open sessions with participants at Congress
23	09:15	DEPARTURE

HOTEL STOFFELLA - Tel.391878 - FAX 310823
2a. Av. 12-28, zona 10

BEST AVAILABLE DOCUMENT

MEMBERS GUATEMALA SNO-PEA COMMITTEE

- Mr. Carlos Martinez	Director of Vegetable Safety Ministry of Agriculture
- Mr. Gerardo Castillo	Director, Export Single Stop Shop Ministry of Economy
- Mr. Ricardo Santa Cruz	Director, Agriculture Commission Non-Traditional Products Exporters Association
x - Mr. Carlos Springmühl 4a AVE. 8-40 ZONA 9 GUATEMALA CITY Tel 502-2-310011 Fax 502-2-312813	Representing Exporters President, "SIESA"
- Mr. Edwin Sarabria	Representing Cooperatives "Cooperativa Magdalena"
- Mr. Victor Hugo Garcia	Representing Growers "San Juan Agroexport"
- Mr. José Orive	Executive Advisor National Sno-Pea Committee

BEST AVAILABLE DOCUMENT

Guatemala, April 25, 1994.-

Ms. Christine F. Chaisson, Ph.D.
TAS, INC.
The Flour Mill
1000 Potomac Street, N.W.
Washington, D.C. 20007

Dear Dr. Chaisson,

On behalf of Guatemala's National Snow Pea Committee, I would like to take this opportunity to thank you for the comprehensive and knowleadgeable talk you gave us last Thursday on important aspects that affect our exports to the United States. Many of the points you touched had been the subject of discussion previously within the Committee and your perspective enriched the understanding of the steps required to overcome the current situation at all levels. I hope that we can stay in touch to further exchange viewpoints on this and other issues of common interest.

Unfortunately, I regret to inform you that I will not be arriving in Washington until Friday, April 29th; as such I cannot have lunch with you as we had agreed since my time will be devoted to the agenda we'll be carrying out with the Minister of Economy. However, I trust that in the future we'll be able to get together and explore these matters more.

Please don't hesitate to contact me if I can ever be of any assistance.

Sincerely,

José Orive V.

José Orive
Executive Advisor

cc. Mr. Clark McDonald
FRUTESA

JAO/

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APPENDIX I

SUSTAIN Description

Sharing U.S. Technology to Aid in the Improvement of Nutrition **(SUSTAIN)** provides access to U.S. expertise in food processing to help improve the safety, quality, and availability of food in developing countries. Technical assistance and training are provided by senior executives and technical specialists from U.S. food companies, universities, and professional associations who donate their time and expertise.

SUSTAIN conducts its activities in collaboration with and at the request of USAID bureaus and missions and local organizations and is an activity under the Food Technology and Enterprise Project of the Global Bureau, Health & Nutrition Office, G/PHN/HN. The program is managed under a cooperative agreement with the National Cooperative Business Association (NCBA) and receives advice from a Steering Committee made up of private sector representatives. NCBA was founded in 1916 and is a membership association representing America's 45,000 cooperative businesses. Known overseas as CLUSA, NCBA works overseas with its own member co-ops, USAID, World Bank, UNDP, and other donor agencies to promote development and joint ventures in the third world.

Many benefits can accrue to the developing world through improvements in food processing. From the standpoint of alleviating hunger and improving nutrition, food processing has much to offer. It helps meet food and nutritional requirements and reduce post-harvest food losses. From the economic standpoint, food processing provides a means for increasing foreign exchange earnings through exporting value-added processed foods rather than commodities. It helps generate employment and stimulates technological development and the growth of allied industries.

SUSTAIN helps improve food quality, expand production, and lower operating costs of locally grown and processed foods by providing technical assistance in post-harvest food systems, including: (a) food safety, quality, and sanitation (b) food preservation, processing, and storage (c) food fortification (d) packaging (e) marketing (f) business management and (g) waste management.

How the Program Works

SUSTAIN receives requests for assistance from individual food companies, research institutions, and USAID. Technical assistance and training are provided by experienced U.S. professionals who donate their time and expertise to the project. Missions are typically one to three weeks in duration. SUSTAIN covers international travel costs. Companies or host organizations requesting SUSTAIN assistance are asked to contribute towards in-country expenses. Due to budget constraints, priority is given to requests that can demonstrate an ability to improve the nutritional quality, safety, and availability of food in the local community. To the extent possible, SUSTAIN coordinates its overseas activities through a local organization. This not only enhances opportunities for technology transfer, but also facilitates coordination of activities and contributes to long-term sustainable development.

SUSTAIN is able to solve many problems by providing information that exists either in technical literature or in the "memory" of a company. If the problem cannot be solved through correspondence, then SUSTAIN volunteers may be sent to provide short-term technical assistance. Workshops and seminars can also be organized to help address food technology issues. The program does not fund product or equipment acquisitions.

The program publishes a quarterly newsletter ***(SUSTAIN Notes)*** on food technology issues. It is provided gratis to over 2200 recipients in more than 50 countries.

For more information, please write to:

SUSTAIN
National Cooperative Business Association
1401 New York Avenue, NW, Suite 1100
Washington, DC 20005-2160
Phone: (202) 638-6222
Fax: (202) 628-6726

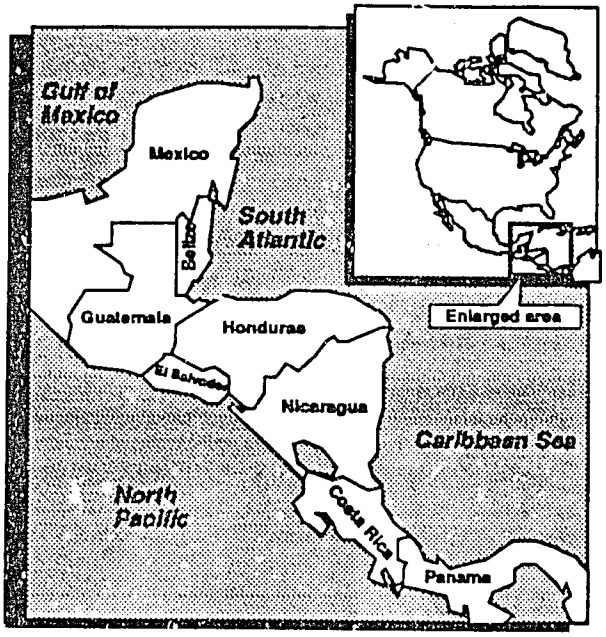
PROEXAG II Description

CHEMONICS

INTERNATIONAL
CONSULTING
DIVISION

PROEXAG

NONTRADITIONAL AGRICULTURAL EXPORT SUPPORT PROJECT



In the last several years, many traditional export crops in Central America—long a major source of foreign exchange earnings—have dramatically declined in value. Central American countries, seeking new areas for economic growth, have begun to encourage the export of nontraditional crops by implementing policies and programs that support producers involved in diversifying their crops.

The Nontraditional Agricultural Export Support project (PROEXAG), funded by the U.S. Agency for International Development's Regional Office for Central American Programs (ROCAP), substantially reinforces this strategy. A contract to implement this project, now valued at almost $8 million, was awarded to Chemonics International in late 1986.

The five-year PROEXAG project has been helping to develop and promote nontraditional agricultural exports by working through and with counterpart, private export support organizations in Guatemala, Honduras, El Salvador, Nicaragua, Panama, and Costa Rica. The organizations are:

- Association of Nontraditional Produce Producers and Exporters (APENN), Nicaragua
- Coalition of Development Initiatives (CINDE), Costa Rica
- Federation of Agricultural and Agroindustrial Producer and Exporter Associations (FPX), Honduras
- Foundation for Agricultural Research (FHIA), Honduras
- Foundation for Social and Economic Development (FUSADES), El Salvador
- Guild of Exporters of Nontraditional Products (GREMIAL), Guatemala

Chemonics' team of five resident advisors, along with highly skilled short-term consultants and local professionals, provides assistance in seven general areas:

- development and management of export enterprises
- crop production
- postharvest handling
- transport
- marketing
- market information systems
- institution building

PROEXAG advisors have dedicated considerable effort to the development and *management of export enterprises.* Their successes include helping local growers maintain or improve exportable yields for established export crops such as melons; develop export quality and volume for relatively new crops such as asparagus and berries; and introduce new export crops such as exotic flowers and seedless watermelon.

Production efforts have focused on assisting in the selection of the ideal species or varieties, identification or development of optimal cultivation practices, pest and disease control, and manipulation of produce growth cycles to fill the most profitable market windows. Accomplishments include aiding in the establishment of seedless watermelon, blackberries, and colored calla lilies as Central American export crops and the design and implementation of a regional melon virus control program. PROEXAG advisors have also taken the lead in achieving more appropriate agrochemical use among growers of export crops through an intensive program of information dissemination and training.

Improved *postharvest handling* practices designed to ensure that produce meets export market standards and reaches foreign consumers in good condition, are particularly important for Central

American produce. This is because produce can take up to six days to reach consumers in the United States and up to 22 days to reach Europe. PROEXAG advisors have conducted numerous seminars, on-site training sessions, and observational tours to train growers, processors, and shippers in appropriate harvesting, pre-cooling, packing and packaging techniques, as well as proper loading, transport, and handling practices.

Transporting produce to its final destination can account for a substantial portion of the landed cost. PROEXAG advisors are working to improve ocean and air services and local infrastructure—identifying new ports of entry, increasing the number, frequency, and capacity of carrier services, and lowering rates. Advice and training has been given to growers and shippers on the pros and cons of various modes of transport for different crops and markets in terms of transit time, cost, and handling; container loading practices and temperature requirements for perishables; and identifying carriers that best meet shipper's needs. Successful shipments have been made to alternate ports of entry, including a new overland commercial route via Mexico. New markets have been accessed as a result of efforts by PROEXAG and other collaborating entities.

PROEXAG's overall *marketing* goal is to increase the volume of nontraditional agricultural exports from the region. To achieve this, team members work to strengthen and diversify links between Central American agricultural producers and promising end markets in the United States, Europe, and Japan. PROEXAG advisors have organized and led tours for Central American growers to U.S. production and marketing centers for high-priority crops such as melons, asparagus, raspberries, blackberries, and cut flowers. In some cases, the tours have been the first opportunity for growers to establish business relationships with U.S. receivers.

To help shippers and growers develop effective marketing strategies, PROEXAG team members also advise on foreign market issues such as consumer preferences, consumption trends, import grades and standards, phytosanitary regulations, pesticide residue tolerances, and competition from the United States and other countries.

Finally, PROEXAG specialist actively, although informally, assist growers and receivers in their efforts to make specific deals to buy and sell produce.

PROEXAG's specialists provide the latest *market information* to Central American export organizations, growers, and shippers through interpretative analyses and the management of customized databases. The Commodity Price Database, for example, designed by PROEXAG's market information specialist, allows local export organizations to retrieve price histories by commodity and end market, then adapt them to the specific needs of associated growers and exporters.

PROEXAG personnel have also codified and relayed substantial quantities of industry, crop, and market information to growers and shippers through reports, formal publications, news bulletins, and advisory trips to cooperating countries.

Even as PROEXAG specialists provide direct assistance to individual growers and shippers, they seek to strengthen the export support organizations listed above as part of their *institution-building* effort. To this end, the team participates or advises in regular meetings, builds familiarity with and access to external experts and information sources, and seeks to build a self-sustaining institutional capability to guide the evolution of nontraditional agricultural export enterprises.

In these areas of technical support, the PROEXAG project is helping growers and shippers increase the production and export of nontraditional crops and thereby helping to promote economic growth in Central America by generating employment and boosting export revenues.

For further information about PROEXAG, please contact:

John Lamb
Team Leader
Proyecto PROEXAG
5ª Ave. 15-45, Zona 10
Edificio Centro Empresarial
Torre 1, 9º nivel
Guatemala City, Guatemala
Telephone: 502-2-33-7082 to 84
Fax: 502-2-33-7081

or

Diane Bejarano
Project Administrator
Chemonics International
2000 M Street, N.W.
Suite 200
Washington, D.C. 20036
Telephone: 202-466-5340
Telex: 1440361 CHNC UT
Fax: 202-331-8202

APPENDIX III

Biographies of SUSTAIN Volunteers

DAMIEN GABIS, Ph.D. (Food Science-Microbiology, North Carolina State University, 1970) is the Chief Executive Officer for Silliker Laboratories Group, Inc. His areas of expertise include microbiology, management of laboratories, Hazard Analysis Critical Control Points (HACCP), and dairy processing. Previously, he was Adjunct Associate Professor of Biology at the Illinois Institute of Technology and a bacteriologist with the Steubenville, Ohio Board of Health. Dr. Gabis has published and lectured widely in the areas of microbiology, food safety, and HACCP. He has served as the President of The International Association of Milk, Food, and Environmental Sanitarians and is active with various professional organizations including the Association of Official Analytical Chemists, American Public Health Association, American Society for Microbiology, and the Institute of Food Technologists. He is a member of SUSTAIN's Steering Committee and Training Methodologies Sub-committee. As a SUSTAIN volunteer, he traveled to Nepal to assess the feasibility of starting a private food testing laboratory.

MARY WAGNER, Ph.D. (Food Science, University of Minnesota, 1984) is Director of Research and Development and Quality and Regulatory Operations at Gorton's, a division of General Mills, Inc. Her areas of expertise include business management, product development, and laboratory management. Previously she was Business Manager with Medallion Laboratories, the analytical testing and consultant service of General Mills, Inc. Dr. Wagner managed Medallion Labs' business, including budgeting, marketing, advertising, program development, and strategic planning. As Manager for New Product Development at General Mills, she initiated a Total Quality program for desserts. Before joining General Mills, she was a Research Food Scientist with General Mills and Assistant Professor of Food Science at the University of Wisconsin. Dr. Wagner serves on SUSTAIN's Steering Committee and is active with the General Mills, Inc. Foundation, the American Society for Microbiology, and the Institute of Food Technologists.

ANTHONY ADAMS is Director of Global Marketing Information for The Coca-Cola Company. His areas of expertise include business management and market research and planning. Prior to joining Coca-Cola, he spent 25 years with Campbell Soup Company, serving as the Vice President of Marketing Research and Planning. He also held various positions dealing with marketing research and brand management. During his years at Campbell he pioneered the company's entry into Eastern European markets and established its first Hispanic marketing strategy. Mr. Adams is Chairman of the Advertising Research Foundation (ARF), past Chairman of the Research Committee of the Association of National Advertisers (ANA), and a member of the Board of Advisors at the University of Georgia Masters Program in Marketing Research. Mr. Adams currently serves on SUSTAIN's Executive Council.

CHRISTINE F. CHAISSON, Ph.D., a principal of Technical Assessment Systems, Inc., is a toxicologist with expertise in quantitative risk assessment interpretation of health effect studies, dietary exposure profiles, and domestic and statistical hazard analysis. Together with her colleagues at TAS, Dr. Chaisson designed and successfully executed premier marketbasket surveys, resolved many of the technical issues blocking the acceptance of imported processed foods containing trace residue of unregistered pesticides or their metabolites, and has greatly expanded and improved the models and operational mechanics involved with the dietary exposure software and dietary profile assessments using both U.S. and international databases. Previously, Dr. Chaisson was a toxicologist at the U.S. Environmental Protection Agency, Office of Pesticides and Toxic Substances in Washington, D.C. During her tenure with EPA, she served in various senior toxicology positions, including Chief of Toxicology and Liaison Scientist to the Department of Labor. She analyzed data relevant to quantitative risk assessments and pioneered the Agency's development of priority research in the area of potential health effects associated with children exposed to agrochemicals. Together with Dr. Barbara Petersen, she designed and implemented the Dietary Residue Evaluation System (formerly Tolerance Assessment System).